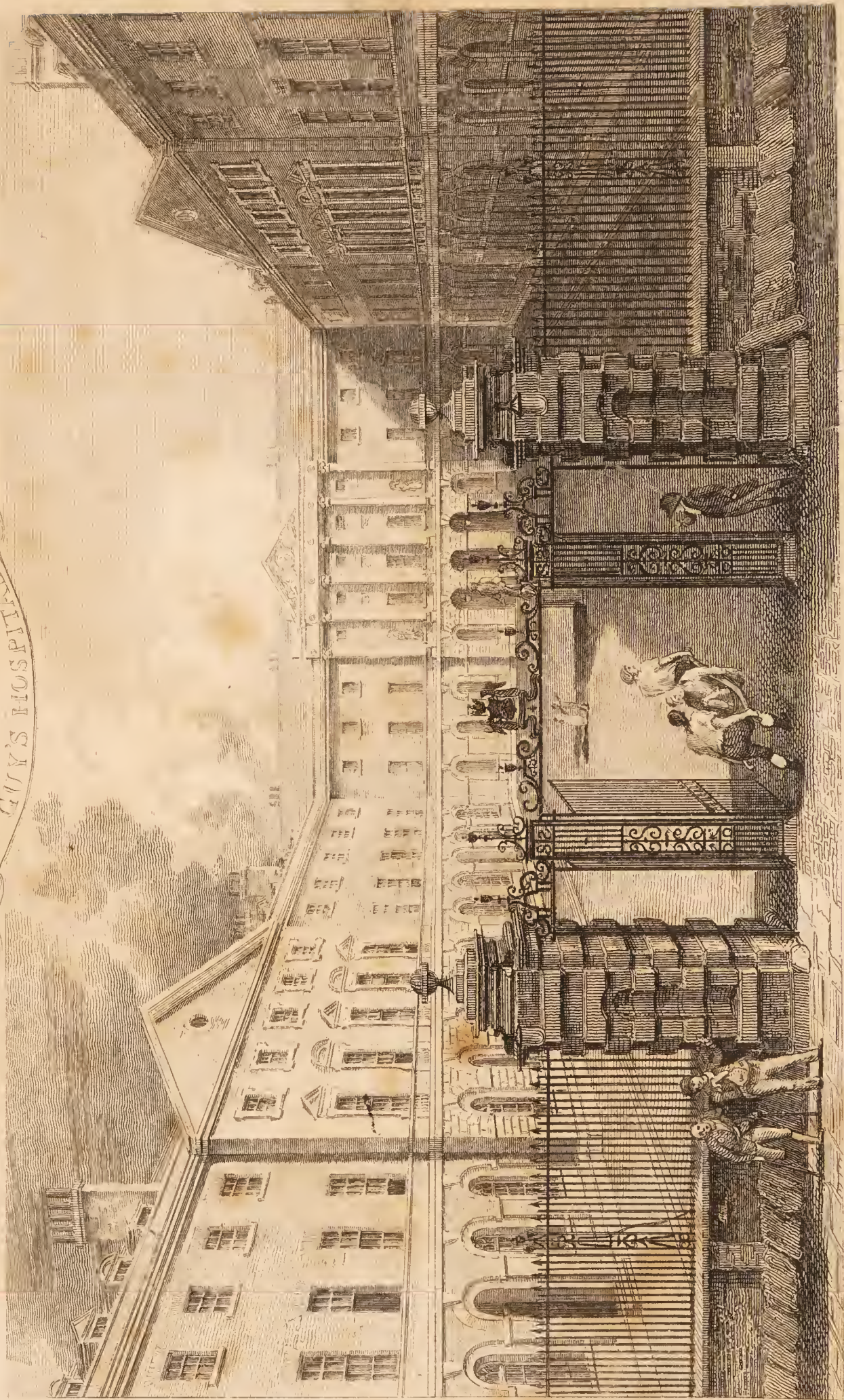


GUY'S HOSPITAL



J. R. Smith delin. J. G. Smith sculp.

OUTLINES
OF
A COURSE OF LECTURES,
ON THE
PRACTICE OF MEDICINE;
DELIVERED IN
THE MEDICAL SCHOOL
OF
Guy's Hospital.

BY

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THE GEOLOGICAL, AND THE PHILOSOPHICAL
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Ut indocti discant, et ament meminisse periti.

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OUTLINES

OF

A COURSE OF LECTURES.

&c.

1. **DISEASE** commonly defined to be,—*Any variation from the most perfect and healthy state of the several organs and functions of the living body.*—Such definition shewn to be too general;—few if any persons having every organ and function in the most perfect state.—Remarkable disparity between mental and corporeal powers in the same person, shewn in the examples of many celebrated men.—Considerable variety even in *bodily* functions, compatible with health.

2. *Health and Disease*, then, *relative* rather than *positive* terms;—and respect the individual as compared with the generality of men, and with himself at different times.—Practical definition of disease,—*An uneasiness,—excess,—or defect, in one or more of the functions of the body or mind,—recurring so often, or continuing so long, as to demand medical assistance.*

3. Organs of the body numerous, and their connexions various;—of course, many different *forms* and *degrees* of disease,—each requiring appropriate treatment.—Hence the necessity of accurately distinguishing them from each

other by certain *signs* or *characters*; which constitutes the science of *Nosology*.

4. Different modes of arrangement proposed by different Nosologists,—each possessing certain advantages.—Dr. Cullen's arrangement preferred, as being on the whole most adapted to practical application.—General outline of this, with remarks upon its merits and defects.

OF FEVER IN GENERAL.

5. Fever the most general of all morbid states;—being common to both sexes,—to every period of life,—and to all climates and countries:—hence Sydenham's calculation of the proportion who die of it, probably under-rated.

6. Has claimed the attention of practitioners and writers in all ages.—Opinions concerning it, of course, extremely different.—Very universally, however, divided into *primary* and *secondary*;—the first arising from general causes, operating on the body at large;—the other depending on inflammation or other local affection:—hence distinguished into *Idiopathic* and *Symptomatic*.

7. General symptoms of *Idiopathic* Fever;—increased frequency of pulse,—preternatural heat, preceded by sensation of cold,—feeling of languor, lassitude, and general uneasiness:—pain of head, back, and limbs:—memory and judgement confused and indistinct;—senses of taste, smell, touch, &c. altered or impaired:—want of appetite,—defect of saliva,—thirst;—discolouration of the tongue;—respiration frequent and anxious:—changes in the urine.

8. Many other symptoms occasionally attend;—but those enumerated *general* and *characteristic*.—Great

2 hours in afternoon

C. Under the first no place, remitting, intermitting, and continued fevers, but under the second that attend upon injuries, inflammation, Abscesses &c.

of which the first is the most common, and the second is the most dangerous.

11 It not infrequently happens that *Systereis*
canalis have a regular cold fit occur during
the night, without any increased Heat following.
Moxammi relates a case of an old female
having a regular attack of chilliness every night
which left her in the morning without being freed
by any increased Heat, which was cured by the

variation even in these ;—hence a desideratum to ascertain some *one* as *characteristic*, and *always present*.—Reasons why we ought not to expect this.—Pain the only symptom that of itself amounts to disease ;—but pain common to almost every disease ;—so that when *alone*, it requires a *negative* character to distinguish its nature.

9. Useless to state the various notions entertained respecting fever by different writers, from the time of Hippocrates down to the present age.—Boerhaave the first who investigated the subject rationally :—found *three* symptoms to occur in every fever during its course, viz. —chilliness,—quickenèd pulse,—and increased heat ;—but fixed on the *second* of these as the *single essential* symptom uniformly present.—His error pointed out.—Slight chilliness often passes unnoticed by patients :—frequency of pulse readily ascertained, and therefore seldom overlooked by the physician ;—but not *constantly* present.

10. Increase of heat considered by the ancients as the characteristic of fever—proved by their names πυρετός and *febris* ;—and certainly necessary to complete the febrile paroxysm, though often absent for some time.

11. *Chilliness*,—*quickenèd pulse*,—and *increased heat*, then, common to *all* idiopathic, and to *many* symptomatic fevers, especially at their commencement ;—and generally occur in the order mentioned.—Objections to this noticed.—Singular case related by Morgagni.—Exacerbation of remitting fever often without *chilliness* ;—but the disease then fully formed, and approaching to the state of continued fever,—which may be considered as having only *one* paroxysm during its course.

12. Another symptom, not less essential to idiopathic

fever, is—*general uneasiness*, pervading every part :—this strongly portrayed in the countenance in some fevers ;— in others shewn by perpetual restlessness and change of posture.

13. Difficulty attending *definition* of disease, from the different views of writers and teachers respecting it.—A strictly logical definition perhaps impossible.—Practical distinctions alone of use ; and disease to be characterized only by the *concourse* and *succession* of symptoms.—Illustration of this in the examples of small-pox, measles, and epidemic catarrh.—Accurate distinction particularly necessary in febrile disorders, from the great variety of their kinds, and from the appropriate treatment necessary even in the different stages of the same case.—Efficacy of opposite remedies reconcileable with the belief of there being something in common to all fevers.

14. Difficulty of framing any definition,—or *short character*,—which will include every variety that may occur :—yet such character necessary, especially for the young practitioner, till rendered familiar with the varieties in fever, and expert in distinguishing them.

15. Paroxysm of intermittent the most perfect example of the febrile state, both in distinctness and order of symptoms.—Description of its symptoms :—indolence—yawning—and stretching ;—diminution of muscular force ;—paleness and dejection of countenance, —hands cold to the touch ;—features contract, and extremities shrink, and become livid :—constriction of skin, producing *cutis anserina* and *horripilatio* :—*feeling* of general coldness,—and soon after actual diminution of temperature—accompanied with frequent chills,—and occasional shudders,—which become more

*sensibility
considerably
diminished.*

17 The secretions are diminished during the two first stages, but return to their natural state during the last.

18 And the appearance of things floating before the eyes, which is certainly owing to a torpor of portions of the Retina.

frequent and considerable,—and at last end in universal shaking.

16. After longer or shorter continuance of cold and shivering, the heat gradually returns, and rises even above 98° , though the patient still feels a sensation of cold; but soon perceives transient flushings,—beginning in face and neck, and alternating with chills,—but gradually extending, and growing more considerable and universal, and at last becoming dry burning heat all over, with great restlessness, and often violent head-ach.—During this progress in temperature, the surface not only acquires natural colour, and shrunk parts their usual size, but become even redder and more turgid than natural. *increased sensibility*

17. Lastly, moisture begins on face and neck; gradually extending, and becoming general perspiration or sweat.—As sweat flows the heat abates; and when ended, body restored to natural temperature, and functions in general to *nearly* their usual state.

18. Symptoms enumerated (15, 16, 17) as constituting entire paroxysm, obviously divide themselves into *three stages*, viz.—the cold,—hot,—and sweating stages:—these accompanied by various other phenomena, that illustrate the several changes, and throw light on the nature of fever in general.

19. Torpor of brain and nerves during cold stage—shewn by diminished sensation of eye, ear, taste, touch;—by impaired state of recollection and judgement;—by state of pulse at first slower, always weaker than ordinary, and often irregular;—by diminished secretion,—want of saliva,—scanty, colourless, and inodorous urine;—dryness of issues, ulcers, &c.;—by short and anxious respiration;—by loss of appetite, and occasionally sickness and vomiting. *which is predicted the coming on of the hot stage.*

20. With return of warmth, sensibility also returns, and becomes even more acute than before, especially to light and noise:—ulcers and other diseased parts grow more painful.—Mental faculties likewise restored; but thought hurried and confused, sometimes even to delirium; and patient's attention absorbed by his general sufferings.

*Is now some
-times become
considerably
more so.*

21. Pulse in the mean time becomes regular, distinct, and full:—and in robust habits, or when pain or inflammation attend, often hard;—but still frequent, though less so than in cold stage.—Respiration also more free and full,—but still rather frequent and oppressed, till sweat takes place, which carries off the heat of skin, and with it the restlessness and oppression of breathing.

22. Such the assemblage and train of symptoms that *usually* occur in intermitting fever; but subject to great variety both in degree and number.

23. Change in Urine also requires notice, as anciently connected with theory of *concoction*; and still much attended to by some, as assisting to form judgement of solution or termination of the disease:—Urine during cold stage, nearly devoid of *colour*, *smell*, or *taste*,—and shews no cloud or sediment on standing.—As heat comes on, arterial action increased, and urine assumes high colour; though still scanty and without sediment.—But when sweat has continued some time, and arterial action abates, the colouring matter deposited in red or *lateritious* sediment.

General Divison of Fevers.

24. Fevers variously divided; ex. gr. 1. into *endemic*, *epidemic*, and *sporadic*;—2. from their causes, into *marsh fevers*, *contagious fevers*, &c.:—3. from the nature and violence of their symptoms, into *inflammatory*, *bilious*, *nervous*, *putrid*, and *malignant*;—4. from the greater or less distinctness of their paroxysms, into *intermitting*, *remitting*, and *continued*, fevers.—Explanation of these terms:—all have their use; but several too vague to found any distinction upon.—*Endemic*, *epidemic*, and *sporadic*, occasionally applicable to most fevers.—*Putrid* and *malignant* not exclusively appropriate to any one kind.—*Intermitting*, *Remitting*, and *Continued* the least ambiguous denominations: these again distinguished by their particular symptoms.

25. Explanation of the terms *intermitting*, *remitting*, and *continued* fever.—Chilliness at each exacerbation not necessary to constitute true *remittent*.

26. *Continent fever* of authors,—their description of it.—Its existence denied by Cullen, De Haen, and the best modern authorities,—and in itself shewn to be improbable.

27. Individual nature of idiopathic fever argued from the spontaneous change of quartan into tertian,—tertian into quotidian,—quotidian into remittent,—and remittent into continued fever;—together with the occasional reverse of this.—Such changes, however, when complete not merely spontaneous; but occasioned by the co-operation of their respective causes, as heat, contagion, marsh-miasmata, &c.—Dr. Cullen's observations on this subject, and his candour pointed out.

General Causes of Fever.

28. These usually divided into *remote* and *proximate*—The former again distinguished into *predisposing* and *occasional*.—The *predisposing*, however, rather facilitate the operation of the *occasional*, than of themselves capable of inducing fever;—such are—*constitution*,—*errors in diet*,—*fear*,—*cold*, &c.:—while the *occasional* seldom fail to excite fever, when applied in a high degree, however slight the predisposition,—ex. gr. *marsh-miasmata*, and *contagion*.

29. This distinction useful, though not always clear;—several of the *predisposing* causes being, in certain cases, capable of inducing actual fever;—while the *occasional* ones sometimes lie dormant, till roused into activity by the accidental occurrence of fear, cold, grief, &c. which thus become *exciting* causes.

30. *Original constitution*—marked especially by *vascular* irritability:—much aided by a certain cachectic state of solids or fluids,—as scrophulous and scorbutic, occasioning acrimonious state of the secretions, especially of the intestinal canal.—Proofs of this in the rapid progress and malignant form of febrile state in such persons, even when arising from common causes.—Hence certain denominations of fever, such as—gastric,—intestinal, &c. used by some authors.

31. Certain constitutions, though not marked by any external signs, appear peculiarly liable to be affected by *particular* causes of fever.—Daily examples of this in the instance of *contagion*.—Remarkable example of the same with respect to *marsh-miasmata*, in the case of two young physicians.

30 It has been observed that Persons of a susceptible habit have an extraordinary tendency to become affected by the application of those Causes which induce Fever.

33 Dr. C. was asked what he thought the most
powerful predisposing Cause of Leven, he
should answer, that state which follows
excess in the use of strong liquors.

32. *Plethora* and *inanition*, though directly opposite, yet both favour the operation of certain causes of fever ;—*plethora* predisposing to fevers of the inflammatory and bilious kind,—while *inanition* predisposes to *intermittents*, and to the *low* or *nervous* fever from contagion.

33. *Errors in diet*.—Excess in animal food predisposes to fevers of high action ;—while vegetable food, especially if poor in kind, favours those of the intermitting and contagious sort.—Effects of these different kinds of food considerably dependant upon original constitution, and also upon present habit of body ;—so that each may be useful under certain circumstances in preventing fever.—These circumstances pointed out, and the kind of food and management proper under them, shewn.—Food of difficult digestion universally injurious :—exemplified in the febrile state taking place after its use in delicate persons,—and in that which follows a debauch even in the strongest.—Power of *custom* in lessening the effects of excess in the use of strong liquors ;—hence temperate persons more liable to fever from *occasional* debauch, than habitual drunkards are.

34. *Sudden or considerable alternation of temperature*—of all others the most frequent *obvious* cause of feverish indisposition of the catarrhal kind, especially in this variable climate : hence the denomination of a COLD, usually given to such indisposition.

35. *Cold* merely a relative term, and strictly signifying a greater or less privation of HEAT ;—but its meaning in ordinary language, founded on the common feelings of men,—and therefore, as far as respects the living body, must be referred to these as a standard.

36. The living human body endowed with power of generating or evolving a degree of heat considerably

above the ordinary temperature of the atmosphere;—and, during health, this degree is pretty uniformly 98° of Fahrenheit, though external temperature varies greatly.—Hence evident power in the living body, of *regulating* the evolution of heat, according to the demand made from without.

37. In physical sense, every temperature of the air or other surrounding medium below 98° , might be denominated *cold*; but not so with regard to *feeling* and to health; and a degree much lower, viz. from 60° to 70° , the most grateful and invigorating.—This wisely ordered, to suit the *general* temperature of the habitable globe, and to allow the evolution of heat consequent upon man's exertions, and necessary to his well-being.

38. General denominations of temperature:—From 60° to 64° admits with ease and safety every exertion necessary either to man's subsistence or pleasure; hence named *temperate*:—the higher degrees up to 70° , called *warm*; and all above that, *hot*.—Of the inferior range, a few degrees under 60° is termed *cool*;—and all below, *cold*.—Considerable difference, however, among men in health, in assigning names to particular *degrees* or *portions* of thermometric scale,—according to their respective power of evolving heat, as depending on original constitution, and on habit.—Illustration of this in the effects of sudden and considerable change of *climate*, or of temperature.—The *natural* power of regulating animal heat limited; and considerable change to be safe should be gradual.

39. Power of cold on living body twofold, viz. *absolute* and *relative*.—*Absolute* power of cold that by which it uniformly tends to reduce the temperature of the body below the standard of 98° , by abstracting heat faster

than it can with ease be evolved.—Balance readily maintained at temperature of 60° ,—but very low temperatures exhaust the calorific powers.—Example of this *partially*, in *frost-nipping* ; and *generally*, in death of whole body, from intense cold ;—proving, that animal heat is not merely a *chemical* process, but depends also on the *living principle*.

40. *Absolute* and *relative* power of cold, or its *sedative* and *stimulant* effects, illustrated by the operation of the cold bath upon a *delicate* and upon a *vigorous* man :—producing in the latter glowing warmth and increased strength ;—in the former chilliness and shivering, followed by burning heat,—in short, febrile paroxysms.

41. Such paroxysm the simplest example of febrile state :—generally subsides like *ephemera*,—or if it remain, assumes the continued form of *catarrh*, with inflammatory constriction of exhalant vessels, and diminished discharge from skin.—Explanation of the common opinion—that such feverish state depends on the perspirable matter being retained.

42. Similar febrile disorder the usual consequence of a person being exposed to *air* of considerably different temperatures, in quick succession ; and especially if change from *hot* to *cold*.—Is generally accompanied with local inflammatory affection of one or other part, according to circumstances of exposure, or particular susceptibility ;—occasioning different degrees and forms of *catarrh*,—*ophthalmia*,—*angina*,—*pneumonia*,—*rheumatism*, &c.

43. Morbid effects of cold greatly increased, if applied to the body when overheated and in copious perspiration.—Hence the serious disorder often caused even by grateful coolness of atmosphere under such state of

body ;—but mischief still more violent when the transition is sudden and great,—as from drinking very cold liquors.—Examples of this from Dr. Rush, Dr. Currie, and others, with the most effectual means of lessening or preventing the dangerous consequences.

44. *Sensation* of cold generally felt when change of temperature produces morbid effects. Neither *sensation* nor *effects* of cold proportioned to its absolute degree,—but rather to previous sensation of heat, and to capacity of bearing the change.—Hence opposite sensations from same temperature at different times,—or even at same time in different parts ;—illustrated by experiment with two vessels of water of different temperatures.

45. Such sensations, however, not permanent, unless the higher temperature be *above* 62°, and the lower one *under* that degree :—illustrated by the Buxton water, which becomes either a cool or tepid bath according to the time of immersion.

46. Power of Cold different according to circumstances either in respect to the cold itself, or to the person to whom it is applied.—Difference from—1st, the intensity of the cold ;—2d, from period of its application ;—3d, from its being accompanied with moisture, and evaporation ;—illustrated by Dr. Currie's account of shipwrecked mariners ;—nevertheless, bad effects of moisture denied by some ;—4th, from cold being applied with current of air ;—*lastly*, from its being a sudden vicissitude.—Dr. Wintringham's opinion,—that epidemics arose from vicissitude alone,—examined, and shewn to be erroneous.

47. Circumstances respecting the person himself, which render him more liable to be hurt by cold ;—1st, defect of calorific power from—fasting,—evacuations,

1. The best remedy for the effects produced by drinking cold water after violent exercise is Opium in large doses as ℥j to ℥ss.

2. Epidemics depend on a certain condition of the Atmosphere but what that condition is, has not been discovered.

49 The increased velocity of the Circulation must necessarily cause a greater quantity of Blood to be sent to the Liver, the consequence of which will be a redundancy of Bile; thus it is, that in warm Climates, & in a warm Season in others, that Bilious Complaints are so prevalent.

—fatigue,—debauch,—excess in venery,—long watching,—much study, and consequently sedentary life ;—rest immediately after violent exercise ;—state of sleep ;—preceding disease :—2dly, from the whole or part of the body being deprived of its usual covering ;—one part being exposed, while the rest are kept warmer than usual ;—the sensibility of the individual, or of the particular part exposed.—Remarks upon each of these circumstances.

48. The power of the circumstances enumerated (47) in *favouring* the operation of cold, confirmed by attending to those which enable persons to *resist* its morbid effects ;—which are,—vigorous constitution, especially with respect to the heart and arteries ;—exercise ;—use of cold bath ;—employment of cordials ;—operation of active passions ;—habit of exposure ;—certain states of morbid excitement of the brain and nerves, as in mania.

49. Sudden and considerable alteration of temperature most readily productive of febrile state,—and especially that from a *high* to a much lower degree of heat.—But continued application of heat considerably above 62°, disposes to febrile condition, and greatly modifies that already present.—Operation of external heat double ;—1st, stimulating the nerves, and increasing the velocity of circulation ;—2d, preventing or lessening certain chemical exchange of principles, made in the course of the circulation under a lower temperature, and found conducive to vigorous health.—Circulation through the hepatic system especially affected by this ; giving rise to certain states of disease particularly noticeable in warm climates, and perhaps too much overlooked by practitioners in the colder ones.

50. Other causes which predispose to, or actually excite fever.—Certain intemperies of the atmosphere, independent of its sensible qualities.—Sydenham's remarks on this; and his consequent division of fevers into *stationary* and *intercurrent*.—Inquires how far the same constitution of atmosphere continuing for a number of years, accords with modern observation:—Each year appears to have certain marked character in its diseases, generally differing from the preceding or following one.—The cause assumed by him, viz. a change in bowels of the earth, was altogether hypothetical in his time, though not improbable now.—Chemical composition of atmosphere now well known;—but its effects on man very different, though its eudiometrical properties the same.—Do not the differences depend rather upon the *mode* or *degree* of combination between its ingredients, than upon their absolute quantities, or their proportions in it as a simple mixture?—Perhaps the particular *electric* state of atmosphere, as connected with nervous or Galvanic influence, may have considerable power in occasioning healthy or morbid effects from atmosphere:—in this view, Sydenham's conjecture may be true.—Accurate register of such changes connected with history of the season and prevailing diseases, still wanting.—Occurrence of catarrh in considerable district, without proof of contagion, or any unusual change in *sensible* qualities of atmosphere.

51. Effluvia of marshes, called *Marsh Miasmata*, the most common cause of intermitting and remitting fever.—These effluvia very different from mere watery exhalations;—many moist situations being free from intermitting fevers. Precise nature of the *Marsh Miasmata* little known;—being void of odour or other sensible

quality.—Macerating moisture and heat, which favour the rapid decomposition of vegetable and animal matter, especially necessary to its production.—Operation of heat shewn, by the more noxious effects of marsh effluvia in warm than in cold climates and seasons ;—and especially in autumn, when heat is often greatest, and many vegetables spontaneously die and rot.—Animal putrefaction less aiding perhaps than might be supposed ; for alone it has little effect on certain trades, as skinners, tanners, &c.—Effluvia from gangrenous decomposition, perhaps an exception.

52. Not every kind even of *vegetable* decomposition that yields febrific miasms.—Remarkable exception in peat ; which is antiseptic.—*Septic vegetable decomposition*, then, the cause ;—and hence explanation of fact observed,—that in the autumn of very wet summers, intermittents have occurred in high, and at other times dry situations, though not observed before or since.—Instances of this in certain high parts of Northamptonshire in the year 1782, which was remarkable for its wetness.—Same principle explains why the mud of great African rivers, which abounds in decomposed animal and vegetable matter, becomes, when exposed by drought, remarkable for occasioning remitting and intermitting fevers.—Hence the periodical fevers at Cairo on retiring of the Nile.—Similar effects on the Guinea coast ; but less at the gradual drying up of the rivers, than at the sudden re-moistening of the dried mud, by general fall of periodic rains.—Country often half depopulated then ; and some parts quite deserted from that cause.

53. Marsh or Phytoseptic miasma not capable, like Contagion, of attaching itself to clothes, &c. ; but speedily dissipated and rendered harmless.—Proofs of this at

Batavia, Bencoolen, and other places.—Instances of sensible difference from removing ships only half a cable's length farther off shore.

54. All land winds contain more or less miasmata.—Proofs of this in a remark made by naval officers:—illustrates the observation of sensible difference in salubrity between the windward and leeward side of West-India islands.

55. *Contagion*—defined.—Applied in certain degree, is of itself capable of inducing fever in any constitution.—Question considered, whether contagion is propagated only by communication,—or can be generated *de novo*.—All contagions certainly capable of multiplying themselves under disease;—and some evidently propagated in that way only;—but others appear to be produced spontaneously under certain circumstances.—Great difficulty respecting the origin of certain specific contagions:—appear to have begun in particular countries at very remote periods, and under peculiar circumstances, so that if once destroyed might never again arise.—No ground, however, to hope for this in typhus, plague, dysentery, and other contagious febrile diseases that occur more than once during life.—Can men carry these contagions always about them, and only become susceptible of their influence under certain circumstances?—Sir J. Pringle's observations on the rise of contagion in crowded hospitals.—Circumstances which particularly favour the production or virulence of typhus contagion;—illustrated by comparative mortality in convict transports and in slave ships:—the difference perhaps, in part, owing to the higher temperature through the whole voyage of the latter ships, which dissipates contagion; but not entirely so, as typhus contagion may be rendered highly virulent and

Where there are a number of Persons collected together in a small space, under a depressing state of Mind, there is a neglect of proper cleanliness and free ventilation, we find Contagion will propagate itself, and attach itself to the clothes of such People, and their being unmoored will affect others who come within its influence, as was instanced in the black apoplexy at Oxford

57 The Irritation of Puerperia in Children will frequently cause Spasms & Convulsions, which will be removed by lancing the Gum, but sometimes it has continued so long before the Gum was lanced, that it will remain for ~~some~~ a considerable time, and this will frequently return in after life in the form of Epilepsy: here then you have an instance of a Proximate Cause.

infectious even in hot climates.—Account of the Boulam Fever,—Malignant Yellow Fever of the West Indies, North America, and Spain.

56. Fear—and excess in venery—also remote causes of fever ;—while firmness of mind gives corresponding tone and vigour to nervous and vascular systems, and lessens or prevents the influence of contagion.—Examples illustrating this ;—remarkable one related by Dr. Coste respecting the last plague at Marseilles.—Effects of fear, grief, &c. related by Diemerbroeck and others.—Observation made respecting new married people during the plague.

Doctrines respecting Fever.

57. By inquiring into the operation common to the several Causes of fever, we approach towards a knowledge of the febrile state.—The nature of a *proximate cause* ill understood ;—hence the search after it rarely successful ;—and the circumstance generally assigned as the proximate cause, either a gratuitous assumption, or some one or other of the more prominent symptoms.

58. Opinion of Hippocrates,—that fever was an effort of Nature to expel something hurtful from the body.—Adopted by Galen and his followers,—and countenanced by various evacuations occasionally attending crisis.—Hence doctrine of *Concoction*, or fermentation and despumation ;—and belief that duration and event depended on these being rapid or slow,—imperfect or complete.—Treatment founded on these ideas.

59. These doctrines (58) universally taught for thirteen centuries ;—and though now exploded among British practitioners, still exist in the language and opinions of the vulgar.—Humoral pathology fully discussed

in Lectures on the Theory of Medicine.—Not sanctioned in fever,—either by observation,—or deducible from most successful plan of cure.—Though morbid cause absorbed and multiplied in certain diseases,—yet in others, no evidence of its existence.—Comparison of contagious febrile disorders with intermittents;—no proof of a *materies morbi* in the latter;—nor the intermissions in them explicable on such idea.—Fever often cut short without attending to concoction:—why this not practicable in every case of febrile disorder;—and why some admit only of being *regulated* during their progress.

60. Revolutions in physic generally in extremes.—Doctrines of Galen undisputed until time of Boerhaave and Hoffman.—Character of Boerhaave.—His opinions more generally adopted than those of any other modern.—Character of his Aphorisms, and the Commentary on them by Van Swieten.—Like all *systems*, aimed at too much. Prevailing corpuscularian philosophy, and his mathematical education, gave a mechanical turn to his opinions respecting living body.—Adopted Loewenhoeck's notion of decreasing series of globular particles in blood; and corresponding series of vessels.—A plausible theory of many diseases founded on this assumption.—His doctrine of *error loci* in inflammation:—seemingly strengthened by his erroneous idea respecting the shape of arteries.

61. Boerhaave's doctrine of Fever, though more gratuitous, yet still plausible,—as agreeing with Loewenhoeck's and his own alledged observations, respecting compounded globules of blood.—Imagined the tendency to aggregation among its particles varied at different times,—and condition or crisis of blood altered accordingly;—occasioning thin and serous, or thick and viscid state,

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the twenty-eighth part of the history of the
the twenty-ninth part of the history of the
the thirtieth part of the history of the

accordingly as aggregative tendency weak or strong.—Assumed *Lentor*, or viscid state of blood, as proximate cause of fever.—His mode of applying this to explain the phenomena of a febrile paroxysm.

62. His theory implicitly received by cotemporary and succeeding physicians.—Was himself the first to see its defects;—and to admit the agency of Nervous System.—Van Swieten's endeavour to explain the difficulty, and maintain his master's credit.—With this explanation, approaches the doctrine of Hoffman and Cullen.

63. Mechanical doctrines incapable of rigorous scrutiny when applied to living body.—No direct proof of viscosity in blood during fever.—The very ground-work, viz. Loewenhoeck's observations, shewn to be a mere fallacy.

64. The Mechanical System of Physic much weakened by chemical discoveries.—Phenomena of Nervous System became more attended to,—especially by Hoffman,—who referred the healthy or diseased condition of body, primarily to the state of the *moving fibre*.—This doctrine strengthened and illustrated by operation of various subtle agents on the living body;—and particularly by the effects of passions and emotions.—The general principle now universally admitted as a fundamental part of pathology.

65. Fever considered by Hoffman as primarily arising from diminished vigour of nervous system, and particularly of brain and spinal marrow;—whence nervous extremities not duly supplied with energy.—Effects of this necessarily greatest in remote parts,—especially in extreme arteries;—whence atonic and spasmodic state of

them.—Application of this to explain some of the phenomena in cold stage.

66. That febrile commotion exists primarily in Nervous System, now universally allowed;—unnecessary, therefore, to enter into the discussion of it.—Hoffman's theory adopted by Dr. Cullen, and illustrated with great ingenuity.—Chief merit, however, due to Hoffman, both as first proposer, and as referring the phenomena of fever to an irregularity and disturbance pervading the nervous system,—and present in every stage of fever;—while Cullen assumes a *symptom*, viz.—spasm of extreme vessels,—as the proximate cause.

67. Sketch of Dr. Cullen's theory of fever.—Remote causes of fever all directly sedative,—and their application occasions debility,—as shewn by—general languor,—weak frequent pulse,—coldness and shivering,—want of appetite, &c. accompanying attack of fever.—Intermitting fever selected as the best example.—Considers *three* states, viz.—of debility,—of cold,—and of heat, as essential to idiopathic and primary fever.—From their occurring in the order enumerated, concludes them related as *cause* and *effect*.

68. So far supported by facts.—But proceeds to assume *spasm* as proximate cause of fever.—To do this, recurs to positions neither congruous with one another,—nor warranted by observation.—No proof of spasm in every fever:—though obvious in intermittents, is much less in remittents,—and often undiscoverable in typhus.—This shewn by comparison of these forms.—Reaction of heart and arteries therefore, to be explained on some other principle or law of the animal economy.

69. Other difficulties attending his theory:—spasm



supposed by him partly owing to the *VIS MEDICATRIX NATURÆ*.—Absurd to believe that the preservative power augments the very same state which it was roused to do away.—The essence of a proximate cause, that,—when present, disease also present,—when removed, disease ceases.—Spasm present only in one stage even of intermitting fever.—Is itself dependant on diminished energy of brain and nerves;—and its recurrence prevented by supporting tone and energy.—Spasm, therefore, only *one* among the concourse of symptoms.

70. Outline of Dr. Brown's theory.—Capacity of living body for receiving impressions, termed by him *excitability*.—Agents or Powers acting on the body, termed *stimuli*.—Life,—health,—and disease, the result of *stimuli* acting on *excitability*.—Certain degree or quantity of excitability assigned at commencement of existence:—is worn out by operation of stimuli,—quicker or slower according to their degree,—and death the necessary consequence.—Speciousness of this;—but irreconcilable with another necessary position,—that the *excitability* is accumulated,—is in proper degree,—or is exhausted,—accordingly as *stimuli* are defective,—in due proportion,—or in excess.

71. Other embarrassments attending this theory.—*Excitability* though varying in *degree*, affirmed to be always simple and individual in its *nature*.—Necessary consequence of this,—that *stimuli* also differ only in *degree*,—and consequently, in certain dose, ought all to have same effect.—That such idea absurd, and contrary to fact, proved from original difference of organs in body, each fitted to its respective agent.—Proved also from specific

and peculiar operation of remedies:—excitability increased by Mercury or Alcohol,—diminished or exhausted by Lead, or Digitalis.—These objections fatal to the whole system.

72. Still farther difficulties of his doctrine with respect to Fever.—No primary stimulant effect observable from Marsh Miasmata, or Contagion of Typhus or Plague.—Hence considered poisons and certain contagions as an exception.—Assumed *debility* as proximate cause of fever;—but avoids explaining how occasioned by these, —or ascertaining whether *direct* or *indirect*;—though this before affirmed by him to be indispensable to the knowledge of disease, and to successful treatment.

73. Though Dr. Brown's *theory* the same,—his *practice* greatly changed within a few years.—Doses of opium and brandy first recommended by him in fever, very much diminished latterly, in consequence of doubts suggested by some of his pupils.—His own practice never sufficient either to verify or disprove his system.

74. Dr. Darwin's theory difficult, if not impossible, to be understood;—his doctrines received by very few;—and no superior success in his own practice, to justify the trouble of studying his system.

Of the Nature of Fever.

75. The investigation of this subject difficult:—much novelty not to be looked for,—but unbiassed relation of facts, and conclusions resulting from attentive observation.

76. Febrile diseases, though numerous and varied, have all something of a common nature.—Causes productive of fever apparently very different in their properties.—General similarity of their effect on living body, explicable only from their tendency to injure and destroy it,—

43 In opposition to Dr. Keil's theory of Fever
originating in inflammation of the brain or
its membranes, it is satisfactorily attested by
various authors, that in Patients who have died
from Idiopathic Fever, the stomach and its con-
-iguous parts have more frequently been found
inflamed.



and the body itself being endowed with Preservative Power to resist their operation.

77. This power or principle chiefly resident in the Nervous System.—Functions of this system not fully ascertained.—*Sensation* inherent in it :—*Motion* derived from it.—*Calorific* function not sufficiently referred to nervous system.—*Doctrine* of respiration and animal heat treated fully in physiological course :—short sketch of it according to the discoveries of Dr. Crawford, Lavoisier, &c.

78. In process so purely chemical as represented by them, *great* variation necessary, according to *relative* as well as *absolute* quantity of Oxygen, Caloric, and Carbon.—A certain *degree* of variation observed in temperature of body, when person in health made to breathe air considerably more or less pure than that of atmosphere ;—but scarcely sensible difference in air of different places and at different times, by eudiometrical tests.—Variation of animal heat, then, while breathing common atmosphere, not owing to difference in the quantity of oxygen it contains ; for the whole portion of oxygen gas inspired at once, not converted into carbonic acid.—Of course, the quantity of Caloric evolved under similar *external* circumstances,—to be referred to that particular vital process which effects an exchange of Caloric and Carbon during circulation.

79. This exchange, or *Calorific Process*, ultimately referable to agency of Nervous System.—Proof of this, in uniformity of animal heat during health, under every variety of external temperature ;—and great difference of it, even under same temperature, if functions of Nervous System deranged.—Morbid variation of animal warmth, sometimes pretty constantly *below*, at other times rather

above the healthy degree,—but oftenest, repeated alternation of *excess* and *defect*.

80. When such alternation begins with *deficient*,—then proceeds to *excessive* evolution of heat,—and these changes recur at intervals with more or less violence,—it then constitutes that morbid state termed PYREXIA:—character of this, as accurately defined by Dr. Cullen.

81. Nature of the process effecting separation of Carbon from solids of body, on one hand,—and its absorption by the blood and consequent evolution of Caloric, on the other,—at present unknown;—but ultimately traced to agency of Nervous System;—and immediately and considerably affected by certain disturbed state of this, while external circumstances unchanged.—Striking proof of this in case related by the late Mr. J. Hunter, and farther illustration of it in the ingenious experiments of Mr. Brodie, (Phil. Trans. Part I. for 1811.)—Such disturbed state of Nervous System, if not *the proximate cause* of pyrexia,—at least very intimately connected with it.

82. This particular state, chiefly characterized by deficient and irregular distribution of nervous energy;—hence often described by the term *debility*.—Such term, however, too general,—as comprehending several species of defective power in Nervous System, not productive of *febrile* state.—Term *atony* used by Dr. Cullen.—This term by itself also objectionable,—as denoting more especially want of tone in *muscular fibre*;—but qualified by word *febrile*, appears sufficiently precise and expressive.

83. Chilly and cold state of body marking commencement of pyrexia, proof of diminished energy in nervous system.—This universally followed by increase of heat,—even to 6° and 8° beyond healthy standard.—Such





alternation directly the reverse of what might be expected.—Illustration of this, by comparison of piece of mechanism with living body.—Retardation or irregularity of *machine*, remains the same, as long as first cause continues to act.—Living body also a machine,—but infinitely superior in construction and operations.—Example of healthy man exposed to marsh miasmata :—first effects, —indisposition to bodily or mental exertion,—lassitude and general uneasiness,—loss of appetite,—small and very frequent pulse,—paleness and shrinking of skin,—chilly sensation and actual coldness,—shaking of whole body ;—in short, cold fit of intermitting fever.

84. So far the effects in *machine* and in living body correspond—But these not permanent in latter,—or death inevitable.—After symptoms of *diminished* power and energy lasting some time,—*opposite* train of symptoms arise :—heat gradually returns, and even exceeds natural degree ;—mind becomes quick and irritable,—its ideas rapid even to delirium ;—pulse grows full and less frequent ;—and lastly, perspiration or sweat succeeds, with relief to all these symptoms, and restoration of bodily and mental functions, nearly or entirely to healthy state.

85. This restoration often only temporary,—and same train of symptoms recurs again after interval of 12, 24, or 48 hours ;—but at other times complete and permanent,—or else each recurrence less severe, until they cease spontaneously.

86. Difference between inanimate machine and living body,—evidently owing to the latter being endowed with PRESERVING PRINCIPLE, or *Vis Medicatrix Naturæ*.

87. Objections made to this principle, from its being

personified by its advocates, and compared with Rational Soul, under different names of *Archæus*,—*Autocrateia*,—and *Anima medica*;—but its existence and operation incontestibly proved in a variety of cases :—examples of these.

88. Objection—that PRESERVING POWER, instead of simply counteracting the primary effects of morbid Cause in fever, occasions even more distressing or dangerous symptoms,—answered ;—the symptoms of *re-action* being *morbid* only because in *excess*.—Application of this to the definition given of disease (par. 2.) pointed out.

89. Every paroxysm of fever, then, consists of *two* sets of symptoms ;—the first set being the *direct* and *immediate* effects of febrific cause, ex. gr. marsh miasma, —contagion, &c. ;—the second arising *indirectly*, or through operation of PRESERVING POWER.—In the increasing or diminishing this *reaction* of the Preserving Power, then, consists a principal part of the cure of fever.

Of the Crisis in Fever.

90. Original signification of the term *κρίσις* ;—its meaning as applied to change in disease.—Strictly denotes either fatal or happy event,—but generally used in latter sense.

91. Curious fact,—that living power, when nearly worn out by successive paroxysms or exacerbations of fever,—should often suddenly and spontaneously recruit,—remove all alarming symptoms,—and leave the patient with little more complaint than general weakness.—This change most striking in *continued* fever ;—and sometimes so remarkable, as to seem the special effect of divine interposition :—bad consequences of such belief among nurses and patient's friends.

91 We ought never to relax our Endeavours to save
Patient, altho to all appearances he may be
past recovery; for Dr C. has known a Patient lay
in a most dangerous state, having lost all his facu-
ties, but the power of swallowing by being frequently
supplied with small quantities of nourishment
in less than four & twenty hours be so far recovered as
to turn on his side and go to sleep, and he has even
truly done well.



92. To understand the nature of crisis,—necessary to recollect the view given (par. 89.) respecting nature of fever.—PRESERVING PRINCIPLE various in degree in different individuals,—periods of life, &c.—Constitution *strong* when PRESERVING POWER *vigorous*,—and *weak* when PRESERVING POWER *defective*.—Force of exciting causes also, viz. Miasmata, Contagion, &c. different on different occasions.—According to relative degree of preserving power on one hand, and force of febrific cause on the other,—the change termed *crisis* will be well marked,—indistinct,—or altogether absent.—Crisis most remarkable, when operation of the febrific agents goes *nearly* to subvert the PRESERVING POWER,—and where it acts directly on Nervous System, without occasioning such derangement of its *organization*, as to unfit it for resuming its functions when the morbid impression has ceased.

93. Morbid impression made by the causes of fever, not permanent,—but wears out after longer or shorter period.—Febrile state induced by cold (unless joined with local inflammation)—seldom of such duration and degree, as to display critical change.—Morbific intemperies of atmosphere constantly applied while it exists;—difficult, therefore, to ascertain the date of its first *effective* impression.—Effect of miasmata occasionally very speedy;—instances mentioned by Lancisi, and by Sir J. Pringle.—Effect of contagion often still more quick.

94. When morbid impression not strong, no actual disease immediately follows.—Interval between effective application of Miasmata, and attack of Intermittent, now and then well marked (par. 31);—but between exposure to Contagion, and commencement of Typhus, often distinctly ascertained.—Agree in producing specific *dis-*

position to their respective kinds of fever, which remains for some time;—and either subsides spontaneously,—*gradually* acquires strength,—or is *suddenly* rendered active by concurrent operation of other remote causes.—This property common to all specific causes of febrile state,—as contagion of Small-Pox,—Measles,—Whooping-Cough, &c.—Utmost limits of interval belonging to these respectively, not ascertained.

95. Duration of actual disease from respective febrile agents, also limited.—Period of this known and uniform in some,—as Small-Pox and Measles;—and perhaps uniform also in Intermitting Fever and Whooping-Cough: but difficult to determine this, and why.—Of less consequence to ascertain it, if it exist, in Intermitting fever, as seldom shewing any marked crisis, and very liable to recur through habit.

96. Crisis most conspicuous, and of most practical consequence, in fevers originating from Contagion,—or in those which *assume* the typhoid type in their progress.—Hence the study of it especially important in those fevers.—Illustration of it by case of healthy person exposed to contagion:—often no sensible effect for a week or more.—Difficult to say how much longer morbid disposition will lie dormant;—perhaps never above *three weeks*.—May wear out or expire silently in certain cases;—is rendered active in others, by *Preserving Power* being weakened from operation of cold,—fear,—grief,—anxiety,—loss of blood, &c.—Duration of morbid impression difficult to determine;—but actual idiopathic fever seldom if ever longer than four weeks,—and often short of that.—Objection,—that patients die after 28th day from actual seizure,—answered:—death then not owing to original febrile state,—but to diseased condi-

95 The usual time that Contagion will remain in the Constitution before it produces Typhus is about 10 Days.

Many of the Officers that were exposed to the Contagion at the Fever at Kaitang, were not attacked with the Fever until a twelvemonth after, when they were on Duty in Spain.

96 The protracted state of Typhus fever frequently depends on Inflammation, or some other Affection of the Abdominal viscera, which the Patient will not complain of, and it is only discovered by examination, when the Patient complains of tenderness on Pressure. The Suppurative also in most cases is covered by a black crust.



tion induced in some important organ,—as inflammation, effusion, or suppuration in brain,—lungs,—liver,—intestines,—mesentery, &c.—Proof of this from *general* febrile disorder often subsiding some days before death in such cases.—Protraction of intermittents often owing to local disease,—especially in liver and spleen.

97. Local affections occurring during the progress of idiopathic fever, also render crisis obscure and imperfect.

98. Febrile derangement of functions proportioned to force of contagion on one hand, and to susceptibility of patient on the other.—May terminate at any period between a few days and three weeks, according to circumstances.—Crisis, or sudden change at termination, most marked when febrile derangement considerable ;—when extended towards the utmost limit of morbid impression ;—and when unopposed by any local affection.

99. Critical termination more frequent and complete at certain periods within this limit of duration, than at others.—Hence the doctrine of CRITICAL DAYS.

100. This doctrine first taught by Hippocrates,—generally admitted by his successors among the ancients,—and maintained by many moderns of great eminence.—Much difference, however, between the advocates for them, as to the particular days ;—and their existence altogether denied by many practitioners.

101. Periodical movements in the body clearly shewn by tertian and quartan periods in intermitting fever.—*Diurnal* movements obvious in continued fever ;—but tendency to tertian and quartan movements also probable in it, from change of type in these fevers,—as well as from the nature of fever in general.—This tendency obscure in continued fevers of this country, and marked

only by greater exacerbation and remission at tertian and quartan periods;—but probably distinct in Greece,—owing to greater uniformity in climate,—and mode of life,—and to inert practice of Hippocrates.—The doctrine also alledged to be influenced by belief in the Pythagorean power of certain numbers.

102. Critical days of Hippocrates,—3^d,—5th,—7th,—9th,—11th,—14th,—17th,—and 20th, from actual attack;—or, Crisis most frequent,—complete,—and favourable on these days;—and oftenest incomplete or unfavourable on the intermediate ones.—First fortnight *tertian* intervals;—afterwards *quartan*.

103. The exact day of attack in fevers from Contagion often uncertain:—hence difficult to determine the *odd* or periodical days, till disease somewhat advanced.—Their regular recurrence likewise altered in many cases, by the operation of remedies.—Critical periods, therefore, less distinct among us than among the ancients;—but their existence and operation in a certain degree still cognizable.

104. A septenary or hebdomadal period most remarkable in those continued fevers, which either arise from Contagion; or become typhoid in their course;—such fevers oftenest terminating at the end of *one*,—*two*,—or *three* weeks from attack; and critical change most conspicuous at these periods,—especially at the *second* and *third*;—whence vulgar phrase of—*fourteen*, and *twenty-one day fever*.—Reason of this.

105. Correspondence with this, in the decided tendency of remitting and intermitting fevers of warm climates, to recur especially at lunar,—semi-lunar,—and quadranti-lunar periods:—and hence the ground of par-





ticular practice in such places.—Account of Dr. Balfour's theory;—evidence in its favour:—has carried his system too far.

106. Crisis in contagious fever most strongly marked, when septenary periodic movement concurs with spontaneous termination of original morbid impression.

107. Amendment in fever generally preceded or accompanied by some spontaneous discharge,—as hemorrhage,—diarrhœa,—sweat,—lateritious deposit in the urine:—whence arose the idea of such discharge being the *cause* of the amendment, by carrying off the *materies morbi*.—Other discharges also mentioned as *critical*, e. g. vomiting,—copious flow of saliva,—abscess, &c.; but these comparatively rare.

108. Twofold view of such discharges by the advocates for Humoral Pathology, viz. as being,—1st, the ground of *prognosis* as to final event,—and, 2^{dly}, as directing us to procure such discharges *artificially*, and thereby successfully imitate the salutary effort of Nature.

109. These discharges, however, even when spontaneous, often useless or hurtful.—Attempt to explain this by imperfect concoction of morbid matter;—but the doctrine shewn to be unfounded;—and even if true, its application to fevers in general neither satisfactory nor safe.

110. The discharges considered as *critical*, shewn to be oftener *effects* of the favourable change in system, than *causes* of it;—but, in certain cases, assist both to form *prognosis*, and *indications of cure*.

111. Remarks on the particular discharges:—1st hemorrhage;—oftenest from the nose;—the quantity generally small;—the relief it sometimes gives, inexplicable

on the notion of morbid matter being evacuated by it :
—in what stage and kind of fever useful and instructive ;
—in what hurtful and unpropitious.

112. Deposit in the urine occurs after each paroxysm of Intermittent (par. 23.), and also at the decline of Acute Rheumatism, &c.—not unfrequent in gouty persons during ordinary health ;—and may be produced in any one by sudorific medicines.—Hence affords no particular indication of cure ;—but occasionally precedes the other phenomena marking a solution of the fever.—Inquiry into the nature of febrile sediment in urine : contains nothing peculiar to the febrile state.—Appearance of the urine in different forms of fever :—sometimes nearly natural ;—often paler, and like whey, particularly in nervous fever or mild typhus.—High colour of it, —different in different kinds of fever ;—causes of this :—sometimes of a deep brown, sooty, or dusky green.—Conclusions to be drawn from these appearances.

113. Increased discharge by perspiration or sweat, the natural and most common termination of febrile paroxysm.—Infectious quality of the matter perspired in contagious fevers, seems to favour the doctrine of morbid matter ;—but such fevers not noticed by its founder ; and the contagion shewn to be the product of morbid action in the perspiratory vessels.—Sweat often universal and profuse for many days without relief ; and rather unfavourable.—Sudor Anglicus described by Dr. Caius.—Partial, cold, and clammy sweats in fever, never attended with relief, and generally very unpropitious.—What kind of sweat is favourable, either when spontaneous, or when procured by remedies.—Merit of Sydenham in exploding the alexipharmic and sweating treatment of fevers in general.

114. When the Fever has continued many Days without any bilious Discharge, a Diarrhoea coming on will be useful, & the stools will generally be pale & dark coloured but if this continues they will be attended with colic, therefore the Practitioner should see them to enable him to judge whether the Discharge ought to be moderated. When the Stools are Bilious he must observe whether they are watery, for if they are, the Patient's strength will be exhausted before the Bile is got rid off.

When in Bilious Fevers there is a copious bilious Discharge from the Bowels, which is sinking the Patient, strength, we shall not find him get better, until there is a real Discharge of Bile takes place, our Object therefore in addition to supporting the strength of the Patient should be, first to moderate the Diarrhoea, and then to give small doses of those Remedies which immediately act on the Liver.

114. **DIARRHŒA** seldomer critical than perspiration ; but sometimes precedes and causes the latter.—Is also more readily excited or restrained by remedies ;—and hence important in a curative view.—Under what state it proves useful, indicated,—by the degree of vascular action,—by the colour, &c. of the stools, as being black and offensive,—yellow,—green, &c.—Kinds of fever in which certain states of the alvine discharge most commonly appear :—prodigious quantity of bile evacuated in certain fevers, and by particular constitutions ;—importance of this discharge to recovery.

GENERAL PROGNOSIS IN FEVER.

115. Several points connected with this, already noticed (par. 110-114.)—Prognosis to be drawn, on the one hand, from *excessive action*,—and, on the other, from *defect of the vis vitæ*.—The first is especially the case in inflammatory fevers,—the other in those of the typhous kind.

116. Simple excess of action not very dangerous, unless particularly violent in some important organ, as the Brain,—Lungs,—Intestines,—Liver, &c. being otherwise within the controul of remedies.

117. *Defect of the vis vitæ* more hazardous.—Ambiguity of the term *Vis Vitæ* from the vague definitions given of it.—Are to understand by it A Principle of Activity and of Preservation, most remarkable in the nervous and muscular substance, but diffused throughout both solids and fluids of the body, and apparently existing in these in different degrees in different persons, and under different circumstances.—The danger, then, to be estimated from its defect in these collectively.

118. Muscular weakness common to all fevers,—but

most sudden and considerable in those from Contagion:—cause of this.—Of itself not alarming.—Defect of *Vis Vitæ* as shewn in the state of the circulation and respiration, more dangerous,—and why.

119. Defect of energy in the Brain, as shewn by the weakness of the mental functions,—constituting different degrees of stupor and delirium,—often very considerable in cases which end favourably.—Active delirium *generally* accompanied with inflammatory condition of the brain:—great danger of this in contagious fevers.—Similar combination of *increased action* with *diminished power* in other vital organs, embarrassing, and difficult to treat successfully.

120. Irregular distribution of nervous influence,—shewn in convulsions,—spasms,—tremors,—subsultus tendinum,—hiccup, &c.

121. *Defect of Vis Vitæ* as shewn in the texture and appearance of the blood when drawn: varieties of these, with remarks upon them.—A *tendency* to the septic process often evident; but an actually *putrid* state of the *circulating mass*, incompatible with life.—Much misrepresentation and error on this subject found in medical writings.

122. Septic state most conspicuous in certain secretions,—especially of the mouth and fauces,—of the intestines, &c.; and the proper light in which such changes are to be considered.

123. Defect of *Vis Vitæ* both in solids and fluids shewn—1st, by effusions of blood under the skin forming *petechiæ*,—*vibices*,—*ecchymoses*;—remarks on these;—2d, by particular yellowness of skin in certain fevers;—important distinction between this and icteritious yellowness;—3d, by passive hemorrhage from the nose,—

120. Convulsions frequently arise in Children from
a collection of morbid matter in the prima via, & we
find ~~by~~^{from} getting rid of this accumulation they generally
subside.

Convulsions arising from Debility are frequently
accompanied with Effusion into the ventricles.
Subalt. Tremor, being always attended with an
alarming degree of Debility must be considered dangerous.
That convulsion is a species of the Diaphragm, provided
there is when connected extreme Debility must be looked
upon as forboding eminent Danger.

122 In simple Inflamⁿ & Fever in consequence of the
thinner of the blood you have the three parts of which
it is composed readily separated. In mixed Fevers, or
where there is inflammation with diminished force,
you also have this separation with a larger propor-
tion of coagulable lymph, & it is of a yellower colour.
In mixed Typhus, the lymph is in still a larger proportion
and the serum is so thin that it looks like the washing
of bloody meat.

123 Petechiae very much resemble flea bites; & it is
appear as if the part had received a blow. and Ecchymosis
is similar to an effusion of blood under the cellular
membrane. These symptoms will sometimes appear
early in fever without a great degree of debility, particu-
larly when the Hot Spasms has been used, but if they
come on at the close of the Disease they must be looked
upon as dangerous.
You will distinguish the yellowness of the skin which is
produced in consequence of the blood not being sent to the
extreme Branches of Arteries, by its appearing in different
places over the Body & the tunics adnata of the eye not
being tinged in any part.

Gargisms of the extreme parts has sometimes taken
place in a state of convalescence in consequence of the
great degree of Debility. on a former visit

124. If you find the Patient very Irritable and catch at every thing that is given him with great eagerness, you may suspect that there is great disturbance of the Brain. & it always proves to be an unfavourable termination.

The Double Vision which sometimes comes on in the beginning is generally attended with Inflammation; if it occurs in the latter end of the Fever it is usually accompanied with Effusion into the ventricles.

If the Patient is unable to lay in any position in the Bed without uneasiness, and lies propped in any is unable to move from it, we must consider it as showing great weakness & consequently danger.

The Extremities being cold & clammy show the defect of the vis. vitæ.

126 The Intermittent & Remittent Fevers arising
from the same causes generally run into each other,
but the last is generally produced by Heat, or such altera-
tion of Temperature as is productive of morbid or left
Inflammation in the system, combined with Marsh
Miasmata will assist us in forming our diagnosis.

mouth,—intestines,—urinary passages :—4th, by gangrene of parts inflamed by blisters, pressure, &c.—Gangrene of the feet sometimes takes place as the fever subsides.

124. Prognosis from change of voice and manner,—eager or difficult deglutition,—appearance of eyes, and of countenance in general ;—posture ;—passing of urine and fæces unconsciously ;—temperature of extremities, &c.

125. Correct prognosis only to be formed from a comprehensive view of the living machine,—the relative importance of its several organs and functions,—the number of these, and the degree in which they are affected ;—the species of fever, and the tendency of it *in general*, as well as of the *particular* epidemic ;—together with the patient's age,—constitution,—previous habit of body,—and mode of life.

DIAGNOSIS OF FEVERS.

126. Every idiopathic fever referrible to one or other of the three principal forms of *Intermittent*,—*Remittent*,—or *Continued Fever*.—The two first owing in part to one cause, viz. Miasmata :—hence often change into each other by the change of season, and other circumstances ; and a consideration of these necessary to form an accurate Diagnosis.—*Continued Fever* of the simply inflammatory kind independent of local affection, not so common as might be expected.—Continued Fever, then, *generally* referrible either to Contagion, or to a peculiar state of atmosphere, which occasions a similar depression of the vital energy ;—and therefore commonly assumes the typhoid character in its progress.

127. Accidental symptoms of local affection, to be

distinguished from the fundamental febrile disease, and not made a ground of multiplying names; which tends to confound disorders essentially the same, and to mislead in practice.

GENERAL CURE OF FEVER.

128. Though the treatment of fever varies greatly in different cases and stages of the disorder, yet certain principles of cure are applicable to fever in general; and a knowledge of these, marks the scientific practitioner.

129. Why fever is occasionally cured by *different*, and even *opposite* modes of treatment;—and the consequent scepticism of many with respect to the utility of medicine, considered.—Every fever, however various its cause, shews a sort of common character, as originating from a *certain disturbed state* of the Nervous System.—Essential nature of this morbid state hitherto unknown, and perhaps will always remain so.—Hence the necessity of attentive observation, and cautious conclusion, to successful practice.

130. Living differs from dead body in its power of beginning motion, and producing various *changes*; both necessary to its existence and well-being.—These constitute the mechanism and chemistry of *life*.—Certain *degree* and *order* of these motions and changes, productive of HEALTH;—and any *excess*, *defect*, or *irregularity* of them, beyond a certain degree, causes DISEASE (par. 2.)

131. Hence, the General Principles of Cure in fever consist, in counteracting the operation of the causes inducing it,—by, 1st, *diminishing* those motions and changes which are in *excess*;—2d, *increasing* those which are *defective*;—and above all,—3d, restoring the due *train* or *order of succession* in those which have had it disturbed.



132. The 1st and 2d indications comprehend all that in general is necessary in fever arising from common causes,—as sudden alternation of temperature,—excess in exercise,—or in eating, drinking, &c.;—but in that produced by specific agents, as Miasmata and Contagion, are properly only palliative, and ward off urgent symptoms, so as to let the specific disease expend itself.—The 3d indication comprises the *essential* cure of fever;—there being no *antidote* to febrile commotion from specific causes.

133. The internal motions and changes of living body too little known to admit of precise definition; but may be expressed by the general term *Actions*.—A fundamental law of these,—that they *naturally* proceed in a certain *train* or *order*, unless disturbed by the operation of hurtful agents;—but that, when so disturbed, they assume *another*, and a *morbid* train or order, and continue this in a *degree*, and for a *period*, proportioned to the *force* of the hurtful cause, and the *permanence* of the impression made by it.—Illustration of this by comparison of fever as arising from *common*, or from *specific* causes.

134. Fevers from Contagion may often be extinguished at their commencement.—Why this not practicable in the advanced stages.

135. In the living body, same *ultimate* effect may arise from different or even opposite causes;—exemplified by the occasional success of *different* and even *opposite* remedies in fever.—But every plan of cure not therefore equally proper;—some one mode being especially suited to the individual *kind*, *degree*, and *stage* of the disease; and the judicious adaptation of it to these respectively, being most uniformly successful.

136. Causes of fever are very generally such as lessen action in the first instance ; hence, the increased action which follows, is from the exertion of the Preserving Principle. — Importance of this in explaining the increased action with *adequate* or *inadequate* power of maintaining it ; — and in adapting the plan of cure accordingly.

137. FIRST GENERAL INDICATION (par. 131.) divisible into two heads, accordingly as the *power is considerable* or *deficient* : — full illustration of these two states, referred to the doctrine of Inflammation. — In every fever there is a state approximating towards one or other form of inflammation, and ready to assume its corresponding form by the concurrence of certain causes. — Tendency to the *active* form chiefly noticed by authors, and by them denominated the PHLOGISTIC DIATHESIS.

138. Particular condition of the nervous system occasioning this, at present unknown ; but its *effects* most obvious in the Sanguiferous System, and our remedies to be chiefly directed to remove these.

139. State of circulation indicating Phlogistic Diathesis, marked by frequency, — strength, — and hardness of pulse, with increased temperature. — Remarks upon these. — Frequency less characteristic than the other states ; — and to be depended upon only as accompanied by them. — Circumstances of the patient's constitution, &c. and of the remote causes, in which such diathesis especially prevails. — Hard pulse sometimes ambiguous, and why. — Increase of temperature, likewise, often greatest where no true phlogistic diathesis present.

140. Collateral symptoms marking phlogistic diathesis.

39 Frequency of the Pulse is not to be depended upon as always characteristic of an Inflamed Diathesis, seldom being above 100. Force and hardness always more marked during this state, and strength of Pulse the least ambiguous as generally attended with Fullness of the System. But when you have increased Heat with of the Body attended with hardness & frequency of the Pulse you have additional proofs of the Phlogistic Diathesis.

Hardness of the Pulse frequently owing to spasm of the Muscular Coat of the Artery without the Inflamed Action being present.



140. You will distinguish the high colour of the Urine during the Inflamed Stage, by its appearing from a flame colour to a deep red, which is depending upon the large quantity of colouring & extractive matters which it contains, sometimes combined with bilious matters which gives it a high colour. When the white fur on the tongue concurs with the former circumstances it is generally characteristic, it will be distinguished from that which is perceived in other Complaints by its being dry & hard, while under other circumstances it is soft & moist.

142. More advantage will be derived from drawing blood from a large vessel & speedily, than from a smaller one. Remove slowly at the more blood may be taken away by the latter means. For in the first instance the Heart & Arteries will not have time to accommodate themselves to the loss, and thus the Disease is frequently cut short.

If a small quantity of blood is taken from a Patient while standing it will produce a much more beneficial effect, than a larger quantity drawn while in the horizontal position, and will considerably lessen the necessity for future bleedings.

Most Epidemics are accompanied with Typhoid symptoms in which we must be careful not to induce too much debility in the commencement.

All febrile Attacks that occur in the Venereal Period of the disease are generally attended with inflammatory action, while those of the Antivenereal Period are accompanied with specific Affections, such as congestion of the Liver &c. are generally put on the Typhoid Type.

The Habit of Blood letting generally gives a Tendency to Petechia. The Buffy Coat on the surface of the Blood and its copious separation generally indicates high action in the Blood vessels. In the necessity of repeating the Operation, but we must always be guided by these appearances, as sometimes it will continue to within a few hours of the Patient's Death. In Cases of the Typhoid Type we are sometimes accompanied with local eruptions we shall find local abstraction of blood more advantageous than general b. as it does not hasten the fatal prostration ^{of strength} which always attends these Fevers.

143. Purgery is indicated to fulfil our second Indication of Laxative excessive action when the power is insufficient ^{care} to support it. The Evacuation of the Bowels should not be to a great extent but be provided on with caution, & Purgatives of a mild nature should be employed, such as Rhubarb & Calomel or the Saline Purgatives.

During the Summer Months there is a particular tendency in the Liver to secrete a larger quantity of Bile than usual, & it is generally of an acrid nature, sometimes it passes into the Intestines & throws its own cure, at others it is absorbed into the Constitution, which is known by the yellowness of the Countenance & Skin. This is generally accompanied with copious sweat which has a peculiar faintish odour which is particularly annoying to the Patient, also attended with low Delirium, & which the Patient is aware, the breath is short & difficult, & the inability to much voluntary Motion. These are the symptoms of the Bilious Remittent Fever of warm Climates which sometimes appears with us in the Summer & Autumn.

A deep copper colour of the face, hot breath, darkness of the Eyes, with inability of protruding it, hardness & smallness of the Pulse, & biting dryness of the Skin, denote the Typhoid Type; & in a word, leads to our specifying in this form of disease by either aid of the Bile, & we Calomel seems fit to it, sometimes at other the symptoms are relieved as evacuation follows, therefore to produce them we may give Calomel or Elix. of Opium.

—High colour of the urine:—necessary distinction here.—White tongue:—discrimination of its kind and degrees.

141. ANTIPHLOGISTIC PLAN extensive:—consists of remedies and regimen.—Latter applicable also to other states of fever.

142. BLOODLETTING the most speedy and powerful remedy.—How rendered most effectual.—Circumstances regulating venæsection in idiopathic fever;—nature of prevailing epidemic;—nature of the remote causes;—season and climate;—degree of phlogistic diathesis present;—period of the fever;—age and natural habit of patient;—former diseases and habit of bloodletting;—appearance of the blood;—and the effects of the first venæsection.—LOCAL BLOODLETTING;—often superior to venæsection;—and admissible when the latter unsafe.—Modes of it,—and in what cases and parts each most suitable.

143. PURGING, another mode of lessening the phlogistic diathesis.—More limited in its effects, and why.—Seldom to be pushed far.—Purging likewise applicable to other states of fever.—Distinction between the *kinds* of evacuation procured by it, as adapted to these respectively.—Its utility as merely emptying the intestines—as carrying off a large portion of Serum,—or as discharging bile;—the circumstances under which one or the other is especially proper, denoted by—the fulness of the vessels,—the state of the countenance,—tongue,—urine,—perspiration,—breathing,—particular sensations. Remedies especially adapted to fulfil the indication under certain circumstances.

144. COLD.—Third mode of lessening excessive action, consists in abstracting the stimulus of heat from

the body.—The temperature of the body in fever very various; hence necessary to discriminate the circumstances requiring its diminution, and the extent of this.—General retrospect of Calorific function (par. 78):—is both a means and an end in the animal economy:—its irregularity essentially connected with fever;—and its restoration an important part of the cure.

145. Balance between *evolution* and *abstraction* of heat in health.—Accumulation of it necessarily results from increase of former, or diminution of latter; and still more from both conjoined.—Hence its reduction twofold; but such division not distinct throughout.

146. Regulation of external temperature—how to be managed;—cautions necessary.—Sydenham's practice animadverted on.

147. Continued abstraction of heat in many instances unsafe, though temperature of body in excess:—reason of this, and explanation of Dr. Currie's remark on the fact.

148. Cooling effect of evaporation—long practically known in particular countries;—proved by Dr. Cullen's Experiments in 1755;—first noticed in living body by Dr. Franklin;—applied to explain certain phenomena observed in the Experiments made in heated rooms, by Sir J. Banks, and Drs. Solander, Blagden, and Fordyce.—Though a principal agent, was not the sole one.

149. Febrile heat generally abated when sweating occurs; but this often the *effect* rather than the *cause*.—Why sweat not proportioned to the force or velocity of the circulation.—Perspiratory vessels, like other secreting ones, liable to diminished function, from excessive action in the adjoining red capillaries:—effect of former in keeping up the latter;—removal of latter

146 Keeping the Room at as low a Temperature as the Patient can bear, especially when the Phlogistic Treatment is used, without exposing him to a stream of air will be found essentially necessary, and when the heat of the atmosphere is not what can be called cold, the Room should be sprinkled with vinegar, particularly when the breath & stools are fætid.

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In the case of Dysentery, of an intermittent character in the com-
mencement of Syphilis, when the temperature of the
body is below the natural standard, the abstraction of blood
from the stomach by means of Cold drink will be hazardous.
Cold drink will be useful when the skin is hot & dry, and
active inflammation is going on.

necessary, in first instance :—why not to be done by the same means in different cases, explained by principle laid down par. 137.—Means proper when both *Power* and *Action strong* ;—those proper where *Action violent*, but *Power diminished*.

150. AFFUSION OF COLD WATER :—history of it ;—the practice ancient, but in general empirical and vague, till illustrated by Dr. Currie's experiments, and successful practice with.—The kind of fever to which it is especially applicable.—The time and manner of using it :—kind of water employed ;—temperature proper in different cases.—When to be abstained from.—Period of the disease at which it succeeds best.—Particular form of fever in which it failed :—conjectures on the causes of this.

151. Obstacles to the use of cold affusion ;—from its novelty ;—from popular prejudice ;—from the heat not being considerable or universal.—Abstraction of heat by sponging the body with vinegar and water, occasionally employed with advantage.—Its effects compared with those of affusion ;—less sudden and powerful :—the frequency and extent of its application, likewise, necessarily committed to the attendants, —hence liable to mismanagement, and not always safe.

152. COLD DRINK. — Abstraction of heat from the stomach by *cold drink*.—Use of this necessarily very ancient, as founded on call of nature.—Recommended by Hippocrates, Galen, and Celsus.—Formerly employed by the Italian physicians, under the title of *Diæta Aquea*, to the exclusion of other remedies.—Its indiscriminate use hazardous, and why.—Circumstances indicating its propriety, or the contrary ;—patient's craving not always a sufficient warrant :—temperature of body,—

state of perspiration ;—signs of congestion or inflammation in thoracic or abdominal viscera.—Dr. Currie's opinion, as to *when alone dangerous*, appears to admit of some restriction.—Its use in some places among the lower classes, to excite diaphoresis in simple fever from cold :—its *modus operandi*.

153. NITRE :—potentially refrigerant effect of when swallowed :—its *modus operandi* obscure ;—not dependant on its absorbing heat during the solution ;—most probably from sedative influence on the stomach.—Its operation uncertain, and not always safe.—Circumstances indicating or counter-indicating its employment.—Mode of administration.

154. ACIDS—in general, when diluted, quench thirst and lessen febrile heat ;—perhaps do both by a common operation ; but this not obvious.—Vinegar rather an exception, especially in certain constitutions.—Choice of acids :—native vegetable the most universally grateful.—Of the mineral acids, the Sulphuric the most frequently used ; probable causes of this :—the Nitrous and Muriatic deserving of comparative trial.—The *antiseptic* effect of acids to be considered under the second general indication.

155. OPIUM.—Abstract question of its being *stimulant* or *sedative*, improper here ;—its power of allaying excessive action under certain circumstances, incontestible. Doctrines which inculcate its uniform operation as a stimulus, therefore fallacious,—Distinction between *power* and *action* affords the only practical explanation of its effects in different cases :—application of this, and its importance shewn.—Particular circumstances limiting or modifying its use, even where indicated by the general condition of the system ; viz. state of the intestines,—of the brain ;—idiosyncrasy.—Means of lessening or removing

153. Nitro will be found most ~~confat~~ beneficial
when loosely diluted with cold water, and will be given
with safety when the pure Phlogistic Diathesis is present.
It will be found injurious in Delicate Habits, and where there
is a tendency to Spasm. In some Delicate Habits, and in those
who are troubled with Dyspeptic Symptoms it sometimes
produces spasms of the Stomach.

155 It is where the Action is excessive and the Power
diminished, that Opium appears to be indicated.
But where there is active Inflammation, constipation of the
Bowels, a torpid state of the vessels of the Brain, marked
by redness of the Eyes, flushed Countenance, Thirst or Lip
Blueness, or Dyscrasy, where instead of allaying it
increases Fermentation, Opium is certainly improper.

155 As a general Rule, the Dose of *Gr. Chin* should not exceed ʒss. or be less than ʒss. & its repetition must be regulated by its effects, seldom given more than twice in 24 Hours in these Doses.

It is found that the external Application of *Chin* will also open Irritation without producing those effects which in some Persons prevent its internal use.

156 After excessive vascular action has been relieved by *Gr. Spargia*, and the Heat of the Skin still remains, the exhibition of Antimonials will prove advantageous particularly in Robust & Plethoric Constitutions.

But in long Typhus unless joined with some Medicine of the same kind, which ~~also~~ ^{more} gives them a more certain determination to the Skin & opens their Action in the Intestines as big common Salt or Opium when the Symptoms will allow it, they will generally prove prejudicial.

the two first.—Opposite practice of Dr. Brown and Dr. Fordyce; strictures on them.—Extent and frequency of the dose most proper in general.—External application.

156. PERSPIRATION or SWEAT, another mode of *lessening excessive action*;—accompanies the remission or crisis of almost every fever:—hence the importance of inducing it as a means of cure; but the method of doing this different, and even opposite in different cases.—Is always most beneficial when *indirectly* procured, or when it is the *consequence* of a favourable change in the system.—Diaphoretic and sudorific medicines, however, often highly useful, especially as adjuvants.—Antimonials the most powerful of these;—all agree in exciting *nausea*;—erroneous conclusion of Dr. Cullen upon this point. Fallacy of his general doctrine already shewn (67-9); and mischievous effects of its application to low fevers, proved from the result of his own practice.—Under what circumstances antimonials may be freely employed;—great caution and nice management required in others.—Means by which their good effects may be often secured.

157. Of the choice of antimonials;—James's Powder, Pulv. Antim. Ph. Lond.—Tartarized Antimony:—uncertainty of the two first;—causes of this. No specific antifebrile virtue in any of them:—pernicious error of a contrary belief respecting James's Powder.

158. Of the 2d general indication,—viz. *to increase those actions which are defective*.—Most agents applied to the living body, capable of increasing action in it; and hence the *universal* conclusion drawn by some, that *all* powers operate only by *stimulating*, and differ merely in *degree*.—Error of this already demonstrated (71.)—In so

complicated a machine as the living body, *same or similar ultimate effects* often arise from agents differing widely in their primary operation:—proof of this in the opposite causes of febrile commotion.—Hence the *second* general indication sometimes fulfilled *in part* by means chiefly adapted to the *first*.

159. TONICS AND STIMULANTS.—Certain remedies, however, operate very uniformly by supporting or increasing action;—and hence properly called *tonics* and *stimulants*:—these especially proper where *power*, or *action*, or both, deficient.—Though *power* physically necessary to *action*, the converse also true in the living body,—or *action* necessary to the maintenance of *power*,—Power and action far from commensurate in disease;—application of this to fever.

160. Distinction between *tonics* and *stimulants*, shewn by the febrile states in which they are respectively found most useful, e. g. intermittents, and low continued fever.—Importance of this, and pernicious error of Brunonian school demonstrated; with recantation of some who were once its most strenuous advocates.—Cinchona seldom beneficial in *continued* fever of any kind:—symptoms absolutely forbidding its use,—as shewn in state of tongue,—of skin,—of intestines,—of urine.—Circumstances admitting its employment:—answers best in convalescent state, and why.

161. Simple Bitters not powerful in Intermittents, and of little use in Continued Fever.—Stimulants:—Serpentaria one of the best:—Conrayerva of little use.—Sulphuric Æther.—Ammonia, &c.

162. CAMPHOR;—its *modus operandi* obscure;—even its taste combines opposite impressions;—appears to act directly on the Nervous System, and hence per-

61. If the Tongue is moist, tho' foul, there is an equable, inspiration on the Throat, or a tendency to profuse perspiration, and no difficulty in Breathing, then the Bark may be given, & sometimes even with advantage. But if the Tongue should become brown & dry, the Throat hot and dry, the pulse hard & then you must abstain from giving it.

62 Camphor may be given in the low stage of Typhus fever, when there is irregular distribution of Nervous influence, & when a rattling Delirium, in combination with Sopor & general anisomnia, and Dr C. has found it promote the evaporation. The best way of producing its effect, is giving a few sublimed doses, with Spt of Wine in the form of Pill or Bolus.

163. Dr. Ch. has not seen the Mineral Acids of use in the beginning of Fever, but the Vegetables, he has.

164. Water impregnated with Carb. Acid. Gas. may be given with Min. in low Fevers.

Dr. Ch. has seen Yeast given in combination with Bark in the proportion of a tea spoonful to an ounce & half of the Bar. with decidedly good effect in the latter stage of Typhus, & he found that more Bark could be taken when joined with it without producing any effect on the stomach. He also found it useful in the Remitting Fever which the Troops laboured under on their return from Batteries, and particularly when they were in a state of Convalescence. It has also been administered in the form of Enema, when it could not be taken by the mouth.

165. When there is a redundancy of Mucus in the Primæ Viæ, Alkalies combine with it and render it more easily acted on by other remedies by which it may be carried off. For this purpose the Carb. of Potash may be given in excess in the effervescent draught.

In low Fevers, the volatile Alkali will be found more useful than the stimulant & drying Diaphoretic already mentioned.

In Diarrhoea where the Excretions smell acid alkalies will be proper, also when there is a redundancy of Bile and it assumes a green colour after it has been stopped off.

haps its use occasionally as a stimulant,—sedative,—or antispasmodic:—nevertheless has no considerable or specific febrifuge virtue; and chiefly useful as an adjuvant to Antimonials, Serpentaria, &c.—Its combination with vinegar highly praised by Huxham; but his commendation evidently more from theory than experience: improbable too from the smallness of the dose.—Would *native* vegetable acids improve it?

163. Acids in general *chemically antiseptic*; and by resisting or correcting septic tendency in fever, may prove *tonic*. But by some affirmed to possess specific febrifuge power:—the fact not yet verified by general observation; and Dr. Reich's *theory* respecting them, shewn to be highly improbable in itself.

164. CARBONIC ACID GAS, or FIXED AIR, powerfully antiseptic *out* of the body, and highly useful where septic process takes place *within* it.—Different forms of administering it, and their respective advantages.—Perhaps Yeast useful only as containing carbonic acid:—the evidence respecting it contradictory;—inconveniencies attending its employment, and mode in which these may probably be avoided, without lessening its efficacy.

165. ALCALIES in general, formerly much employed in fevers, to counteract their alledged cause, a predominant acidity. Their use, especially the Carbonate of Potass,—again revived in North America, and highly extolled as most powerfully antiseptic.—Occasionally serviceable, but greatly over-rated.—Circumstances under which they seem indicated.

166. WINE the most grateful of all remedies as a tonic and stimulant in certain states of low fever: reasons for this:—Pernicious error of considering it universally

such, and consequently indicated in proportion as living powers *appear* sunk, or their actions diminished.—Recapitulation of general principles respecting greater or less permanency of febrile impression—from the nature of its causes,—and from its degree or duration; and application of these with regard to wine.—Circumstances limiting or precluding its use, especially state of the brain.—Dose and management most efficacious.—Choice of wines;—Cyder,—Perry,—Malt liquors,—Punch.

167. WARM OR TEPID BATH, a remedy well adapted to lessen morbid irritation in the low state of fever, equalize the circulation, and relieve the oppressed powers of the system.—Obstacles to its employment.—Warm *affusion* may often be usefully substituted.

168. FRICTION WITH OIL.—Strong testimonies in its favour, in preventing and curing the plague.—Its use in fever very ancient—its *modus operandi* inquired into.—Proposed in Yellow Fever, and Typhus.—Circumstances under which it is indicated, and mode of using it in conjunction with cold or tepid affusion.

169. Of the DIET generally proper under different kinds of fever.—Of strong cravings for particular and often unusual articles of food or drink.—Under what circumstances to be considered as indication of Nature, and freely indulged.—Remarkable examples of this.

170. THIRD GENERAL INDICATION, viz. *to restore the due train, or order of succession, in those functions which have had it disturbed.*—This *in part* fulfilled by the means adapted to the two first indications;—but often speedily and effectually accomplished, by exciting *another* commotion, which breaks the *morbid* train, and allows the *natural* one to be resumed.—No specific

166 In no case ought we to exceed the quantity of a Pint in 24 hours, & to shorten or to Quench, but in general half a pint will be sufficient. It ought always to be diluted with an equal quantity of water, if there is want of Heat in the Body. The water should be warm & some fragrant Aromatic joined with it. Port or Cherry are the most proper, but if the Patient has a preference to any other he may be indulged, if he has been accustomed to acid spirits, Punch will be best. If there is a Transverse Port ought to be given as its Astringency will be advantageous. If the Patient prefers small beads he should be indulged as they in general will be found equally useful.

167. The Suspension of the Water which will be found most serviceable is that from 96 to 96, for the Patient will be able to remain in it longer, and it will produce a much more soothing and fragrant effect than a higher one, but if we wish to bring on profuse perspiration in order to relieve ~~local~~ congestion in consequence of local inflammation we increase the Heat gradually to 98, then if perspiration has not set in on the forehead and the Patient is easy we go on raising it to 100 Degrees, and the Patient should remain longer than usual in the Bath, but whenever we want to soothe him by a gentle and general Perspiration the former Temperature will be better. We must guard against the sudden evaporation of the Heat after the Patient has come out of the Bath. In the latter stage of Fever where there is an obstacle to the use of the Bath from the inveterate exertion which it necessarily produces, which would be found to do away the good effect of the Bath the Tepid Affusion will be found preferable, and very beneficial to children. The Affusion may be used when there is no local Inflammation.

100. The strong craving for particular articles of Food, when
it does not occur at the time of the crisis, particularly
if it was not attracted by bad habits, should always be
indulged, & Dr. Ch has known a favourable change take
after it. In the latter stage of Fever this will frequently
be found to produce a rapid amendment even when
indulged in to excess if the crisis has taken place, an
instance of this in the late D. Cunn, who when recovering
from a severe attack of Fever was expressing a desire
for grapes was indulged & lost 30 Pounds in 6 Days
after which he rapidly got well.

171. The Antimonial Surtis are generally given in Fevers, and when there is any considerable action in the Pulse they are especially useful; but in weak habits, the cal. will be better, or it may be joined with the Antimonial. Tartaric.

172. When there is any local Inflammation or congestion in any organ, a Blister applied in the neighborhood of the part will be extremely useful after the vessels have been unloaded of their Blood by local Bleeding.

173. moderate blisters should be allowed to remain on the part after redness is produced, for if continued longer they will cause necrosation of the skin.

They act more speedily than Plasters and without producing any discharge & therefore do not weaken as the latter. They may be applied to the pit of the Stomach with advantage to allay ineffectual vomiting.

remedy for this purpose;—occasionally effected by different and even opposite means;—and hence Medicine stigmatized by the ignorant and interested, as merely conjectural.—Injustice of the charge shewn, and its mischievous consequences pointed out.

171. Kinds and stages of fever in which this method of cure (170) is successful or safe.—Often injudiciously attempted by cordials and stimulating diaphoretics;—said to be accomplished in many cases by profuse blood-letting;—is *certainly* so in others by cold affusion;—but most effectually in general by *Emetics*.—Rationale of their operation; some more efficacious than others;—why so.—Occasionally fail altogether, or give only a temporary relief.—Means proper to aid their good effects, or to secure them when attained;—cathartics,—diaphoretics,—diluents,—pediluvium,—blisters.

172. Remarks upon these several *adjuvantia* in the cure of fever,—and the cases to which they are respectively adapted.—Blisters operate doubly, viz. as evacuants,—and as stimulants.—Circumstances to which one or other, or conjoined operation more especially suited;—period, and place of application, regulated accordingly.—Dr. Lind's testimony of their great usefulness in the commencement of fever, subject to some doubt;—why so.

173. SINAPISMS:—operation of them, in what different from blisters.—Their use more limited; but sometimes greatly superior.—When especially indicated.—Where best applied, and management of them.

174. Other remedies occasionally employed;—but these rather suited to particular fevers, and to be considered under them respectively.

✎ The symptoms occurring in individual cases of fever, so various in *degree* and *kind*, as to make their combinations at first appear innumerable; but certain limits to these combinations evident on farther observation; and fevers accordingly distinguished into *Genera* by their leading and characteristic marks; and into *Species* and *Varieties* by their secondary and accidental symptoms.—The *purser* forms of each, however, or the *genera* of fever, can alone be described and treated of in a course of lectures;—a discriminative knowledge of the *species* and *varieties*, being acquired only by personal attention to the influence of constitution,—habit of body,—climate,—season,—and other causes, as illustrated by Clinical Practice.

The necessity of accurately investigating the mode of attack, and the probable causes of every individual fever, and also of a watchful attention to its general type and progressive variations, inculcated, as the only means either of justly comprehending, or successfully treating, this multiform and important disease.

OF SIMPLE INFLAMMATORY FEVER.

175. The *καῦσις*, or *febris ardens* of the ancients? the *SYNOCHA* of Cullen;—origin and meaning of these names.

176. Characteristic symptoms;—chilliness followed by violent and continued dry heat,—flushed countenance,—suffused redness of eyes and skin,—frequent, strong, and hard pulse;—acute pain of head and loins;—heaviness—and aching of the limbs;—white and dry tongue;—thirst;—costiveness, and high-coloured urine;—vigilance,

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176. Intolerance of sound, difficulty of seeing things, sometimes nausea, or even vomiting to sickness, &c. The Delirium may amount to Chrenitis.

177. Persons of a sanguineous, and sometimes those of a choleric Temperament are the subjects of this Fever. The exciting causes are abrupt Passions of the Mind, full and intemperate living, hard exercise, and long exposure to the direct rays of the Sun.

178. When any organ becomes affected then the Disease chiefly belongs to the Phlegmasia of that Organ. When the Complaint terminates fatally it is generally within the first two or three Days, but this is an rare occurrence.

180. This Fever is attended with greater vigilance and increased burning Heat than Typhoid, the Pulse is not so full & hard, but quicker than usual. The Tongue is coated in the beginning with a yellow fur but afterwards it becomes brown & dark, the excretions are very fetid, not unfrequently a considerable quantity of Bile is thrown up. There is also oppression at the thoracic, a coughing here & there continues, eyes are fixed & half closed, urine turbid, but so deeply tinged. The Patient lyes in a state of stupor & deafness comes on early.

181. Under some circumstances Post mortem will produce it, but it is by no means a general rule.

or disturbed and delirious sleep ;—occasionally tightness across the chest, intolerance of light, &c.

177. Why not so common as the other kinds of fever, and why perhaps less so now than in former ages,—shewn from the circumstances of constitution necessary to its existence. What description of persons especially liable to it.—Predisposing and exciting causes.

178. Sometimes terminates in inflammation of the brain, — lungs, — liver, — intestines, — or joints ; — or changes its form, and approaches to that of typhus,—thereby constituting the *Synochus* of Cullen.

179. Remedies:—Bloodletting general and topical,—Cathartics,—antimonial diaphoretics.—*Digitalis*.—Nitre. Blisters ;—Cold affusion?—Remarks on these, and on certain combinations of medicine which display peculiar powers.—Emetics seldom required or useful in *Synocha* ; and why.

OF THE SUB-INFLAMMATORY FEVER OF COLD CLIMATES.

180. The *Synochus* of Cullen :—his definition of it.—Circumstances in which it differs from *Synocha*, illustrated by—the season of the year,—the constitutions and habits in which it chiefly takes place, and the symptoms that attend it ; especially by the speedy and great change from the *first* or sub-inflammatory stage, to that of *impaired power*, as marked by—the state of the tongue,—pulse,—excretions,—countenance,—eyes,—and brain.

181. Question—how far connected with Contagion, either as a *cause* or *consequence* ;—and therefore, in what sense Dr. Cullen's definition to be admitted.

182. Variation of treatment from that proper in Sy-

179. We must never, any more, than we do, occur
yourself in a painful condition, and then we
of a large place we may come in to a great danger, some
since the danger is. When there is any local inflam-
mation or excitation, topical bloodletting will be highly
serviceable; the same caution will be decidedly
useful, as our object is to increase increased action, & to
produce a sensible discharge. The Antimonial Diaphor. continues
in some times so as to produce a evacuating effect.

Digitalis will be found a useful adjuvant, as it has a power-
ful effect on the vascular system, and after Cal. & Aconitine
have been employed it will be found particularly useful
in lowering vascular action & preventing it, increase.

After dissolved in barley water for common drink. Blisters
should be abstained from in the commencement, but to
aid topical bleeding they will be useful. Cold affusion, if
we wish to employ this remedy, we must have recourse to it
immediately after Cal. before we give any medicine to produce
expectoration. The combination of Fast. Antimon. & Flys Saliva
will produce a pre determination to the skin & keep up an
action on the bowels. Dr. Ch. has seen this Digitalis combined
with the Antimon. Diaphor. increase action & produce a
determination to the skin, and when the latter have been
ineffectual the addition of the Digitalis has produced the
desired effect. Emetics may be employed as adjuvants, but
they will not be found to produce that beneficial effect
they do in other Fevers, but when it is attended with haemorrhage
we have reason to think it has been produced by errors
in Diet, Emetics will be useful.

Cold affusion is not so useful here, as when the heat
is kept by increased action on the skin, where as
in this fever it is caused by the increased action of
the Heart & Arteries.

nocha :—an opposite *extreme* too often pursued in the *Second* stage ;—reason of this mistake, and its bad consequences shewn.—Why Venesection *less*, but local bleeding and purging *more* necessary.—Certain purgatives especially useful : proofs of this ; and marks whereby to regulate their frequency and strength.

183. Other means proper :—Local bloodletting,—Diaphoretics,—Pediluvium ;—and occasionally Emetics,—Blisters,—Opiates,—as indicated by particular symptoms.

OF INTERMITTING AND REMITTING FEVERS.

184. DEFINITION ;—Fever consisting of repeated paroxysms, which seldom recur oftener than once in twenty-four hours, and have a complete intermission, or very considerable remission between them.—Vulgarly termed Agues ;—whence the name.

185. The symptoms attending the respective stages of an Intermittent, already described (par. 15.)

186. Phytoseptic Miasmata (51) or the vapour arising from moist soils impregnated with a quantity of vegetable matter in a state of *septic* decomposition,—the *essential cause* of both Intermittent and Remittent Fevers ;—hence such fevers *endemic* in marshy districts ; and occasionally prevail *epidemically* during very wet seasons, even in high and usually dry places (52), so as to appear contagious.—Reasons for thinking *pure Intermittents* never contagious ; but that *Remittents* sometimes are so.^x—Causes co-operating with Marsh or Phytoseptic Miasmata to give the *remittent* form :—hence shewn why Intermittents and Remittents often change into each other, and both into Continued Fever ;—why reverse of this last change less frequent.

187. Intermittents in temperate and cold climates

182. It may have recourse to the Lungs with more
attention in the common case with adynamia, as we
shall see about the high muscular action & the covering, very
debility which would follow, but more recent in cases where
the Disease is kept up by any existing cause, as congestion
of the Liver. We are generally said that a local bloodletting
is more adapted to the Dissolution of the Solid vessels
than this more generally attacks. When the typhoid
symptoms come on we must draw off, and if congestion of any
organ remains we must draw a local bleeding.
In the Inflamed Stage Calomel & the saline Cathartics are
proper, when the secretions of the bowels become solid
remains of Calomel will be highly useful also when
there is congestion of the Liver, where the Patient is subject
to Diarrhoea Rhuic Sydenham will be better.
In the commencement of the Fever after 60. the cold affusion
will be found extremely useful, & the typhoid symptoms come
the rapid affusion may be substituted, but is, even, that
the Body is wiped dry afterwards. The Antidote Deodor-
ant will be sufficient in the typhoid, but afterwards the
more stimulating as big Ammoniac, Capsul. Cathartica
and Anemona. Emetics will be more useful than in
Typhoid. Appear at the onset, particularly where the
Stomach is deranged. Blisters may be applied at the
latter part of the Disease when there is any local con-
gestion after bleeding. Spirits are sometimes useful, but must
be used with caution, they may be given when there
is Delirium accompanied with congestion of blood
in the Brain, also joined with Diaphoresis to prevent their
running off by the bowels when there is Diarrhoea.
When the Headache is kept up by disorder of the Primæ viæ
application of flapping cloths over the Head will prove
serviceable. Cold applications to the Head are always
of use. But it must be under those circumstances in
which any Fever would become Contagious, such as crowd-
ing together a number of People in confined Places where
there is want of due cleanliness & free ventilation.

most common in Spring and Autumn:—reason of this, —and also why the *vernal* are milder, with somewhat of inflammatory diathesis, while the *autumnal* are more severe, and rather shew a tendency to the low continued, or typhoid form.

188. Division of Intermittents according to their periods of recurring;—as Quotidians,—Tertians,—and Quartans:—occasional instances of more distant periods, as Quintans,—Sextans,—Octans, &c. ;—but these latter very rare, and then seldom steady.—Other divisions into Single,—Double,—and Triple Tertians and Quartans ;—Sub-intrants or Sub-Continued, &c.

189. First three types by far the most common, and especially the Tertian.—Their respective characters as to hours of attack,—length and severity of paroxysm,—comparative danger,—and difficulty of cure.

190. Intermittents and Remittents also variously denominated from particular or predominant symptoms; as *Leipyria*,—*Assodes*,—*Elodes*,—*Syncopalis*,—*Carotica*,—*Epileptica*,—*Tetanodes*, &c. accordingly as the paroxysm is chiefly marked by—unusual coldness—excessive heat and dryness,—profuse and long continued sweating,—or is attended with fainting,—stupor,—convulsion,—or violent spasms.—Lastly, they are called *regular* or *irregular*, *mild* or *malignant*, *bilious* or *inflammatory*,—accordingly as their type is steady or variable,—their symptoms moderate or dangerous—or as they appear with redundant or deficient excretion of bile,—or with inflammation of some important part, viz. the liver,—lungs, &c.

191. These distinctions (190) often useful in directing our attention to the relief of certain organs and func-

tions of primary consequence; and especially in those countries where such fevers proceed with great rapidity to a fatal termination,—or to lay the foundation of other slower, though not less dangerous diseases:—But those denoting *the period of recurrence*, most important in general; as marking the time we have to employ with effect some of the most valuable remedies.

192. PROGNOSIS,—to be drawn from the age,—constitution—and habit of the patient;—the season of the year;—the type of the fever,—its degree,—its being sporadic, or epidemic;—and its being simple and regular,—or anomalous, and accompanied with other diseases.

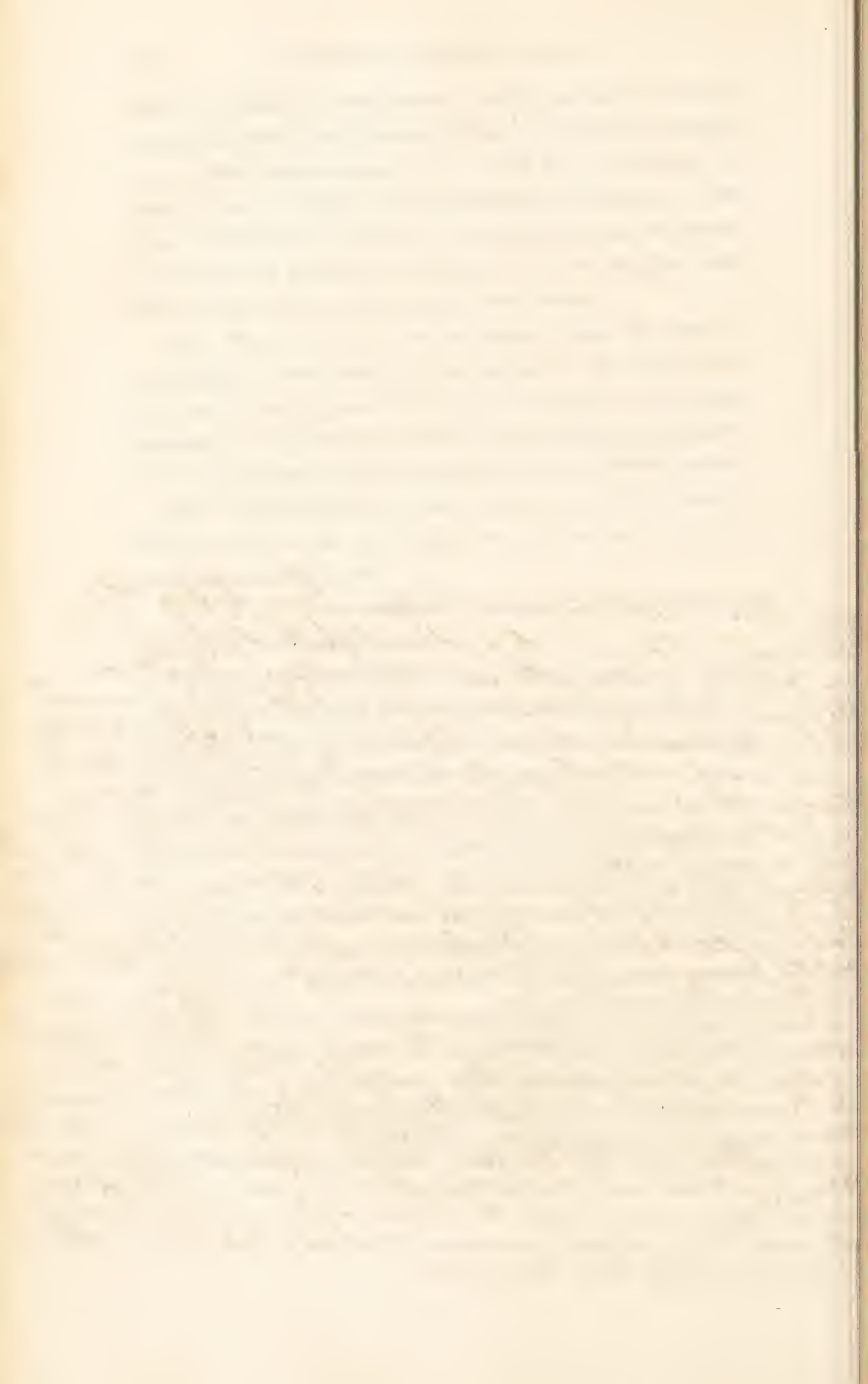
193. Consideration of the question made by several authors—How far it is right to put an early stop to mild intermitting fever.

194. THE TREATMENT of SIMPLE INTERMITTING FEVER consists in,—

FIRST,—*When the paroxysm is approaching*,—(and provided the strength and other circumstances will allow of it) administering near to the period of accession, certain remedies capable of exciting an opposite action or commotion in the system, so as to break through or suspend the morbid train about to take place, and thereby entirely supersede or greatly mitigate the expected attack; e. g. Emetics;—Opiates, either alone or combined with Calomel.—Various stimulating articles taken into the stomach, or applied externally.—Compression of the femoral arteries.—Circumstances under which one or other of these means is more especially proper;—or which give a preference to certain individual articles over others capable of fulfilling the general intention.—Remarks on the operation of various mental impressions

194. I am Imitis be given Half an hour before the
paroxysm, it frequently puts a stop to it, if not it
mitigates it, in strong Persons the relaxing Imitis as
the preparations of Cinchona will be best, but in weak
Habits, the Iron Imitis, as Sulph. Ferri vel Capri, but this
is not so safe as the Imitis, which may be combined with the
Ipecac with advantage, where necessary I venture to give
an Imitis, Opium may be substituted with advantage, where
there is vascular distension, it may be joined with Diaph. and
Calomel, this may be given when there is Biliary obstruction,
it will also be found useful after Imitis, or by giving a suffi-
cient quantity to produce Stygalism in 24 hours it may pre-
vent the paroxysm, but Dr. C. has never found it do this with-
out the assistance of Imitis.

Stimulating Infusions may be given in the cold stage to
assist on the Hot. no other or Wine, but in Plethoric & strong
Habits we ought not to give them except in the Cold stage.
In Persons of delicate Habit the Compression of the Femoral
Artery may be advantageous; Powerful impressions on the Mind
may be useful when the Disease has been of long continuance
Frenzy has sometimes this effect, a case related of an
Indian who was cured by the Person slipping into a pool of
water, even Disputatious Vomiting has been sufficient
to put a stop to the Paroxysm.



196. The best way of giving the Bark is in doses of ℥i
every three or four hours, stopping it when the Paroxysm
comes on, but in Eustidians every hour; the Cascarella
will be found to aid the Bark and enable the Stomach
to retain it when it rejects it. The Carb. Vegetab. produces
nausea in some Stomachs, but when it agrees it has been
found equally successful as the Bark: D. L. has seen this
succinus Carduatus even agree when the Cinchona has
failed, given in the dose of ℥i twice a day, it may be joined with
Bark with advantage. The Carb. Vegetab. ought not to be given
if the Eyes can be cured by Bittis & Castor oil. The Cascarella
& Cinch. is less powerful than Cassia, & the Sulph. of Iron generally
produces sickness. When the Bark runs off by the
Bowels it may be joined with Opium & an Anodyne.

195 When we employ Cold Affusion it should be had recourse to, before the paroxysm shows itself, and in stage Habits it has been found to succeed.

In the Hot stage. Bloodletting may be useful in full & Plethoric Habits, when the Heat of the Skin is great.

In the sweating stage the Patient should be kept in a room at the Temperature of 60.

Stimulants have been recommended in the cold stage but we should remember that the following stage is accompanied with considerable action, in some Habits, however they may be given with caution. Dr. would prefer Aether, he has seen Opium given but adorns with any good effect.

In the Hot stage when there is considerable Delirium A. may be employed. an Opiate often puts a stop to this stage and hastens on the sweating one, Dr. has never known it produce any aggravation of the symptoms.

Purgatives should be given so as to produce their operation at the time of the Hot stage, which will often shorten the Paroxysm.

The Patient should be cautioned against drinking any cold liquors during the sweating stage.

197 If Inflammⁿ or congestion of any Organ occurs we should treat it in the same way as we should if no intermittent was present, and when the organ gets into a healthy state, we may proceed with our Rem.

When the intermittent assumes the continued form we should abstain too hastily in the use of Bark.

When there is Dysentery we may give Calomel with Pulsatilla or Opium: and when the Paroxysm is likely to come on combining it with Opium &c. generally the Fever is of the continued form when we should treat it as simple Dysentery, when this is removed, we shall find it assume the intermittent form again, when we may give the usual Remedies. If Diarrhoea attends, Aconitis and Opium will be proper, when there is an enlargement of the Spleen we must have recourse to alterative Doses of Mercury. When there is Jaundice, frequently by being an Intestine we cause an effusion of Bile into the Intestines & then we may proceed with the Bark. Jaundice will generally be cured by the same means as the Ague.

in the cure of Ague;—and conclusions from thence as to the essential nature and primary seat of the disease.

195. SECONDLY,—*When the paroxysm is already present*,—Mitigating the violence of the symptoms proper to the several stages respectively; as—Of the *Cold Stage*, by the warm bath,—pediluvium,—warm diluents, &c.—Of the *Hot Stage*,—by bloodletting (?)—by Cold Affusion (?)—by Opiates,—cool drink,—Nitre,—Antimonial, —Purgatives, &c.—Of the *Sweating Stage*,—by regulation of external temperature,—cooling sub-acid, or diluted vinous liquors.

196. THIRDLY,—*When the paroxysm is over*,—Taking advantage of the intermission, to increase the tone and vigour of the System, and thereby to postpone, mitigate, or entirely prevent a recurrence, as well as to obviate the chance of subsequent diseases;—by—various vegetable tonics,—as Cinchona,—Cort. Salicis,—Cort. Swietenia;—Cascarilla, &c.—by simple bitters, either alone or combined with Vegetable or Fossil Astringents and with Aromatics;—by certain metallic preparations,—as Liquor Arsenicalis,—Sulphas Zinci et Cupri,—different Chalybeates? &c.—Directions as to the choice, dose, and management of these several remedies.

197. Variation of treatment necessary when the Intermittent is accompanied with inflammation or congestion in the—liver,—lungs,—brain, &c.—or attended with diarrhoea or dysentery,—or with obstructed or enlarged liver or spleen, and their consequences;—jaundice,—dropsy, &c.

198. REMITTING FEVER.—A compound disease, made up of Intermittent and Continued Fever combined in various degrees and proportions; and having a

well-marked double or single quotidian, or a tertian exacerbation.—Requires therefore a mixed plan of treatment, regulated by the predominance of the Continued or Intermitting type,—by the nature of the Cause which co-operates with the Miasmata to give an inflammatory, —bilious,—or typhoid form;—and by the case being attended by some prominent and urgent symptom, or complicated with some other disorder (197.)

OF THE ENDEMIC FEVER OF TROPICAL CLIMATES.

199. CAUSES of this fever operating on the natives and long resident inhabitants of such climates, but still more upon new comers; viz.—miasmata,—heat,—fatigue,—occasional intemperance,—certain conditions and sudden changes of the atmosphere.—Assumes the *Continued*, —*Remittent*,—or *Intermittent type*, according to—the season of the year, the constitution of the patient,—and the combination of exciting causes.—Often changes with the season, and other circumstances, from one of these types to another.

200. SYMPTOMS of the two first types, as constituting the *ordinary Bilious Continued*, and *Bilious Remitting Fever* of hot Climates.

FIRST STAGE,—heaviness,—anorexia,—general lassitude,—occasional transient chills, succeeded by hot flushes, and these by continued and often intense heat of skin,—quick and throbbing, or hard pulse;—headach;—glairy, white, or buffy tongue;—nausea,—pain, and often burning heat at stomach,—retching,—vomiting of slimy or bilious matter;—great restlessness,—deep sighing,—excessive anguish and sense of oppression, particularly referred to the præcordia;—flushed countenance;—

198 This fever is often connected with Influenza & so we
discuss and the treatment. Dusted & much Influenza
continued from with the fever. It most frequently
occurs in Persons of a Melancholic Habit, in those who
are obliged to work in the heat of the Sun, or have lived
very intemperately. It will be generally necessary to treat
it in the commencement as a continued Fever, & I dare not
venture to give the Bath at first. In warm Climates it
generally assumes the Bilious form, when suppurating places over
the liver & Purgatives will be proper. But in France it runs
on the Typhoid Type.

First Stage, The Bowels are generally costive.



Second Stage. The brain generally contains some
of the Red Particles of the Blood. Haemorrhage
frequently takes place from the Bowels.

suffused yellowish redness of eyes ; high coloured bilious urine,—strangury ;—partial sweats, of a peculiar faint smell ;—great watchfulness ;—delirium.

SECOND STAGE ;—Pulse becomes weaker, and less frequent ;—heat considerably diminished ;—clammy perspirations ;—tongue black and crusty ;—retching almost incessant, often bringing up a coffee-coloured matter ;—hiccup ;—black and foetid urine and stools ;—death-like sensation of faintness at times : Occasionally, yellowness of the whole body—lethargic stupor or wild delirium ;—tremors,—convulsions,—death.

201. *Anomalous Symptoms* ;—general or partial numbness ;—tetanic spasms ;—suppression of urine ;—syncope ;—great coldness of particular parts, &c.

202. SYMPTOMS especially marking the *aggravated* form of the Tropical Endemic, and constituting the *Causus Icterodes*, or ARDENT YELLOW FEVER.

FIRST STAGE ;—Sudden and violent attack of pain in the head, back, thighs and legs,—with giddiness,—great prostration of strength, and often a fit resembling the stupor of apoplexy or intoxication ;—acute burning pain at stomach, and almost continual vomiting, at first of slimy, but afterwards of dark coloured, and sometimes bloody fluid ;—eyes red and protruding ; face and neck suffused and tumid ;—countenance grim and terrific ;—arid scorching heat of the skin ;—tongue leaden-coloured and glairy, or morbidly clean and red ;—intense thirst ;—extreme restlessness and anxiety ;—hæmorrhage from the nose.

SECOND STAGE ;—After a paroxysm marked by a number of these symptoms, and lasting from a few hours to two or three days, a deceitful appearance of remission takes place ; the vomiting, headach, burning heat, and

delirium, greatly abate, or nearly disappear; the pulse loses its hardness, and falls even below the natural frequency: the patient eats, drinks, and declares himself well or nearly so. But the interval is often short; and either a repetition of the same violent symptoms takes place, with marks of *greatly diminished power*, or the patient sinks at once into a comatose state, only interrupted by hiccup, and vomiting of dark coloured fluid,—with black and fetid stools,—yellow suffusion of the skin, varying in degree from a sallow hue to a deep orange tint,—interspersed with livid blotches, or ecchymoses, and accompanied with discharge of blood from various parts, especially the nose, mouth, and intestines;—the scene closing either in a convulsive struggle,—a state of torpid apathy,—or in a calm and collected resignation of life.

203. Such the general picture; but various anomalies observed in the mode of attack;—and in the number, violence, and duration of the symptoms; arising from—constitution and habit,—the nature and degree of the predisposing and exciting causes,—and the neglect or employment of preventionary measures,—or the mode of treatment adopted at the first onset of the disease.

204. CAUSES tending to produce this aggravated form of the Tropical Fever, and operating especially on newly arrived Europeans; viz.—irritable, tense fibre;—plethora;—rich blood;—sudden change of climate;—imprudent exposure to the sun's heat, or night air, and dews;—continuance of accustomed but unsuitable diet and habits;—anxiety of mind and fear of death,—or despondency and indifference to life.

205. Question—how far depending upon stationary endemic causes of soil and temperature,—or upon occa-

203. It has been observed that before the Complaint comes on, there is a darkness of the Countenance, and by proper attention the Attack may be prevented at this time.



210. Mercury in small doses and given often will frequently
remove the derangement of the liver. It will not be found
to produce its alterative effect until the fever has been removed.
Purges may be given to prevent the Mercury assuming the
character of the Bowels, and to prevent sickness, but purges are
improper at first, but if there is no sickness they may be
given joined with Mercury as alteratives. Calomel will
be preferable to Liniment of Turpentine when the system under the
action of Mercury. Castor oil better when there is laxity of
the Bowels. When Stimulants are indicated Senna may be
given, when there is considerable debility, Senna Symplicia
Syrupus present, either will be proper. If there is considera-
ble Irritability of the Stomach Coffee may be given cold, without Sugar
Milk, as strong as possible, Acid Ferments, such as bread & Lemons
Lemons ^{when} there is no irritability of the Stomach or Bowels will
be found very serviceable. Cold water will be found very beneficial
in there is irritability of the Stomach, when there is ^{out} sickness.
Patient ought not to drink it, but an early warm ^{out} this month
to it and it may be impregnated with some the juice of some
Acid Ferments.

206. Inflammation of the surface of the Stomach and of the
Pyloric extremity, also of the small Intestines & frequently
of the Liver. sometimes it has been found extremely fatal and
even fatal.

Doctors have supposed the Black vomit ^{consists of} to
be an Effusion of Blood from the small arteries of the Stomach.

209. In full Plethoric Habits blood will be necessary
in order to relieve the system of the great accumulation
of Blood. but in delicate Persons Ipecac Blooding will
be sufficient. The Mercenial Purgatives will be the best
suited to this complaint. That excessive Irritability of the
Stomach which comes on will be relieved by timely Purga-
tives; some recommend Icthar. Antimony, but it is a ques-
tion whether this is proper in a Disease where the Stomach
is so irritable. Cold affusion judiciously employed will
be found to give great relief. In the aggravated form Emetics
are certainly improper, but they are sometimes given in
the milder cases; small doses of Opium is the best means
of allaying the Irritation, together with the application of Hoping
to the Stomach, Purgatives & warm Bath.

sional and peculiar influence of atmosphere;—and whether ever contagious: with the variance among writers concerning these points. Proofs of its being occasionally *joined* with contagion, and assuming a new character in consequence, viz. the *Typhus icterodes*, or MALIGNANT YELLOW FEVER.

206. Description of appearances on dissection, and the remarkable discordancy of different writers.—Opposite opinions also respecting the yellowness;—and an attempt to solve the difficulty, and establish some general and consistent views of the disease.

207. PROGNOSIS—extremely uncertain; but, in general, proportioned to the *violence of action* on the one hand,—and the *defect of power* on the other.

208. TREATMENT of the ARDENT or MALIGNANT YELLOW FEVER, hitherto very dissimilar, and extremely unsuccessful:—Causes of this.—Remarks on the different means recommended, and an endeavour to shew, how far they are respectively adapted to the general nature, the present stage,—and the particular predominant symptoms of the complaint.

209. FIRST STAGE:—Bloodletting, general and local:—Cathartics; what kinds best.—Cold affusion:—Oily friction.—Emetics?

210. SECOND STAGE:—Tepid bath or affusion, either alone, or alternated with cold affusion.—Spiritous fomentation?—Blisters.—Mercury.—Opiates.—Antimonial?—Cinchona?—Quassia and other Simple Bitters:—Cusparia:—Cascarilla:—Serpentaria:—Æther:—Ammonia:—Vinous and Malt Liquors.—Essence of Spruce?—Spruce Beer.—Coffee.—Acid Fruits.—Cold Water, &c.

OF THE NERVOUS FEVER.

211. The *Febricula* of Manningham,—the *Slow Nervous Fever* of Huxham,—the *Typhus mitior* of Cullen.—Reasons for preferring the name adopted above, as designating a description of fever requiring a particular treatment.

212. SYMPTOMS ;—general languor and lassitude ;—loss of appetite, and depraved taste ;—dulness and confusion of thought ;—sadness of mind, and dejection of countenance ;—respiration short, with frequent sighing ;—general chillness, with occasional transient and partial flushings,—and disturbed or unrefreshing sleep :—these often continuing for several days without confinement, and with but little notice, till followed by—aching in the back and limbs,—dull pain in the head, especially the occiput ;—giddiness, and tinnitus aurium ;—nausea, and vomiting of insipid fluid ;—frequent, weak, and often intermitting pulse, with sense of anxiety and oppression about the *præcordia*, and excessive faintness, especially in the erect posture.—There is still little thirst or heat of skin ;—the tongue is tremulous, moist, and covered with a whitish mucus ;—the urine watery or whey-coloured ;—and the bowels rather costive :—but as the disease advances, the heat increases,—the tongue becomes dry, and brown, or morbidly red,—the urine scanty and high-coloured,—and either considerable sweating or diarrhœa comes on, with deafness, drowsiness, and delirious sleep—or *coma*, *subsultus tendinum*,—cold extremities—clammy sweats, and involuntary discharge of urine and stools take place, followed by slight convulsions and death.

213. PROGNOSIS.—A salutary crisis is often preceded by slight ptyalism, or moderate diarrhœa ; but

213. If the Stools consist of offensive matter, it will keep
the Symptoms, which will give way as this paper off.



217. In the treatment of this Disease we should find that be-
either general or local is indicated. In the beginning a brisk
laxative is frequently found to cut short the morbid train of
symptoms, this combination of Opium & Calomel is the best.
The Purgative Dr. has generally relied on is Rhubarb, and where
the secretions were depressed he joined it with Calomel. Blisters
behind the neck will remove that tendency to Delirium, and
weight of the Head, much better than Cal. but when there is a
great determination of blood to the Head than ordinary, as
few leeches will be proper. Sanguinaria & Coniaryena are the
most preferable Diaph. the Lig: Camom. each is also proper here.
Camphor may be given in the form of Tulep as a vehicle for the
Lig. Camom. or in substance in doses of five grs every
four or six hours, but when there is much heat on the Head
Rush is a remedy particularly suited to this Disease.
and given in Doses of ʒss to ʒss it will produce rest &
abate Delirium. Opium may be given in small Doses
to allay the colliquative Discharge, and abate Delirium.
Wine should be given in small quantities as an article of
diet and to keep up the Strength. White Wine & Mustard
they are particularly useful as they will produce and
keep up a perspiration from the Skin. When there is
a Diarrhea the fœt. aromatic. may be exhibited joined with
any of the above Remedies; or when there is Substus Lungs
This is a Disease which will often continue for many Weeks
without producing any urgent symptoms.

especially by a gentle, warm, and equable perspiration.—Deafness without insensibility is favourable, as are scabby eruptions about the mouth, or boils in other parts:—while profuse evacuations,—partial clammy sweats,—cold extremities, subsultus,—and insensibility,—with tremulous pulse,—portend great danger.

214. The CAUSES *predisposing* to this form of fever are,—a thin, pale, and weak habit of body,—great sensibility of mind,—much study and watching,—vegetable or poor diet,—grief,—anxiety,—profuse evacuations,—excessive venery.

215. The EXCITING CAUSES are,—Cold, especially with moisture;—Occasional Debauch,—Contagion.

216. General character of the disease deduced from these several circumstances.

217. TREATMENT as founded on this character:—Early brisk Emetic:—Gentle laxatives;—Blisters—Diffusive diaphoretics—Pediluvium,—Camphor,—Musk,—Castor?—Opiates;—Wine;—Serpentaria,—Ammonia.—Serum vinosum vel Sinapeos:—&c.

OF TYPHUS FEVER.

218. The *Malignant contagious*,—*Petechial*,—*putrid*,—*Jail*,—*Hospital*, and *Ship Fever* of Authors:—Whence these names;—Derivation of the word TYPHUS,—and reasons for adopting it.

219. SYMPTOMS,—in the beginning occasionally like those of Nervous Fever (212); but the attack in general more sudden and violent, and the progress more rapid and alarming:—usually considerable chillness,—gradually ending in, acrid, and often burning dry heat with little remission;—great prostration of strength, general

anguish of body and depression of spirits;—short and anxious breathing;—nausea, and vomiting, sometimes bilious;—pulse quick, small, and occasionally hard;—distressing headach,—noise in the ears,—and throbbing at the temples;—eyes sunk, dull, and listless, with dusky, sallow, dejected countenance;—or ferrety, red, and rolling, with flushed countenance, and restlessness or fierce delirium;—tongue generally foul, often brown or black, with parched blackness of the lips, and fetid sordes about the teeth:—sometimes considerable thirst, sometimes none.—Urine scanty;—at first little changed, but progressively becoming high-coloured, sometimes greenish, or sooty, and generally of a strong peculiar smell.—Stools dark coloured and offensive, and in the advanced stage often profuse and involuntary:—Occasionally hæmorrhage from the nose, intestines, &c. but oftener extravasations of blood from the cutaneous vessels, producing red, purple, or livid spots, weals, or marks like bruises, on the neck, breast, arms, and other parts; and by their colour and extent shewing the malignity and danger of the disease.

220. Great variety in the symptoms, in number, degree, and kind; arising from—constitution,—habit of body,—climate and season,—prevailing epidemic influence,—and the force and concurrence of the several predisposing and exciting causes.—Account of the chief varieties, as shown in the principal organs and functions affected,—and leading to important steps in the treatment.

221. PREDISPOSING CAUSES—not only those enumerated in par. 214, but many others,—some of them opposite in their nature;—plethora (32),—long continued heat;—excess in animal food and strong liquors;—foul air;—epidemic influence.

a rankish and bitter taste in the mouth.

24. Low muttering Delirium, Flaccidities, & convulsions. Solitantes occur at the latter period of this Disease.

If Diarrhoea attends with swelling of the Abdomen, it must be considered as a dangerous symptom, as it will tend to exhaust the Patient's Strength.

Subultus Indurium & spasm of the cricoid muscle of the throat.

220. If it occurs in the Catarrh, it is generally attended with Bilious symptoms, and it is more prevalent at this season in cold & damp weather, also in the Spring.

It is often accompanied with organic Affections, particularly of the Brain & Abdominal viscera. Sir J. Phipps imagined that low muttering ^{Delirium} was kept up by an Abscess in the Brain, but Dr. Cusack had a Case where it continued as long as the Patient recovered, therefore it appears that ~~indeed~~ disordered functions of the Brain may pass on for some time without producing disorganization. The viscera of the Abdomen are more generally affected & often the Patient

carried off by Inflammⁿ of the Peritoneum, you must not lose sight of this, as he will frequently not complain much from pressure; very frequently you have congestion of the Liver & the system of the Venae portae will require your particular attention; sometimes the Inflammⁿ of the lungs, which will be spoken of hereafter.

When it occurs in weakly Habits, the symptoms which first the Patient notices are generally those of nervous Power, in strong Constitutions, those that have been mentioned.

221. This fever is more frequent in cold and temperate climates, than in warm ones.

225. You will find that those Authors who have
employed bot. could not repeat it a second time,
but Local Bleeding may be employed with advan-
tage.

223. Profuse sweats accompanied with a great Degree of Coma & stupor & determination of Blood to the Brain should be considered as a favourable symptom. Change of voice is an unfavourable sign.

225. The hair at the Head in Typhus is referred to the back, but not at the coronal suture, while in Typhus Fever it is situated at the Forehead, and this will assist us in our Diagnosis.

226. 2nd stage. In Pneumonia a weak cold into the habit
we thought that cold effusion will cut short the fever,
an emetic will sometimes produce the same effect,
but will considerably mitigate the symptoms. In ful-
minant & toxic constitutions. It may be proper, to make
found success in putting a stop to the yellow fever in
some climates. In the present stage, we must give the
strongest Diaphoretics, where there is a set for tension cy-
stoid, we must give Antiseptics, as tartaric acid &c.
and the bicarbonate, as the main & direct.

then there is inflammation or eruption of any organ, "suppurative" blisters should be applied over it, they will be found to be the most useful, sometimes even cutting short the course of the disease when we cannot have recourse to so dangerous a measure. It is true that, in increasing the Temperature, we often hurt the system, but this is a necessary evil. Purgatives, too, have a powerful effect in the removal of morbid secretions of the bowels, and of the skin, and in the removal of the morbid matter from the system.

But they will be found efficacious, but more so in the latter
part than in the beginning of the Complaint, particularly
after we get as there is a dyspnoea. Deaphnia is
only in the attack, where there is considerable strength
in the action. Deaphnia may be given, but as we shall have

222. The grand EXCITING CAUSE—accumulated human effluvia, or the morbid vapour arising from the bodies of persons confined in close apartments, especially if already labouring under the same complaint, or even under Remitting Fever.

223. PROGNOSIS :—A gentle, universal, warm perspiration, with diminished frequency and increased fullness of pulse,—cleaner tongue,—scabby eruptions about the mouth,—and moderately loose stools, are favourable changes :—while partial clammy sweats,—weaker, and irregular, or tremulous pulse,—dry, black, and chopped lips and tongue,—tension of the abdomen,—involuntary urine and stools,—coma, or constant delirium,—plucking the bed-clothes,—laboured respiration, and difficulty of swallowing,—precede a fatal event.

224. General character of the disease,—as deduced from its prominent symptoms, and its chief exciting cause,—contrasted with that of Nervous Fever, and applied to the plan of cure.

225. THE TREATMENT—consists, in part, of all the three indications already considered under the *General Cure of Fever*; but especially—in the *First Stage*—diminishing excessive *action* without lessening *power*;—and (where the strength will permit) trying to supersede the *febrile* by exciting *another* commotion :—in the *Second Stage*,—by increasing or restoring those functions and actions which are impaired or suspended,—so as to maintain the power of the system until the *specific febrile impression* has ceased;—and, as a principal means of effecting this, correcting the *septic tendency* that displays itself in the secreted fluids and circulating mass :—Throughout the whole progress of the case, paying attention to every urgent symptom, whether proper to the disease, or accidentally conjoined with it.

226. Remarks upon the several remedies more especially calculated to answer these intentions,—and the *stages* or *circumstances* of the disease, to which they are respectively adapted ;—Early Emetic—particular laxatives ;—Cold Affusion ;—Leeches ;—Blisters ;—Diaphoretics ;—Pediluvium, and tepid Bath or Affusion ;—Wine ;—Serpentaria, —Cinchona ;—Acids ;—Carbonic Acid Gas,—Fermenting liquors,—Yeast ;—Opiates ;—Camphor ;—Phosphorus? &c.

OF INFLAMMATION IN GENERAL.

227. Though the rise, progress, and result of Inflammation are more obvious than those of any other diseased state, yet its nature in general, and its treatment in particular circumstances, by no means agreed upon.—The subject highly important.

228. Essential symptoms ;—pain ;—increased redness and heat,—with swelling or tension of the part :—these varying greatly, both in positive degree and in relative proportion.

229. Example of the progressive steps (228) shewn in Ophthalmia from external irritation.—Preternatural accumulation and distension evident.—Proofs of these taking place more especially in the *ultimate arteries* and *veins*,—from the number and course of the vessels,—from injecting the part.—Conclusion from hence as to the real seat of inflammation.

230. Similar phenomena (228,-9) occur *spontaneously* also.—Various theories adopted at different times to explain them :—unnecessary to discuss all these.—Boerhaave's (as it is usually called) first deserving notice : recapitulation of this (60) ; and its application to solve the phenomena, shewn to be inadequate.

great destruction of strength follow, they must not be con-
tinued too long, therefore we should give the Reg. Gum in
Acid either in Rins. Gargles, or Infus. Lemon 2℥ of this. Topt.
When the strength is falling rapidly we must on 1st Intest
Carbon of Ammonia and small quantities of Wine should
be given occasionally. Dr. C. has never seen the Ricina
given with advantage, often been obliged to abandon it.
At the latter period, the Infus. Rose with Dil. Sulph. Acid
may be given as the common Drink if the Bowels were not
loose, so as to take a full course in 24 hours, when there
is Diarrhea with Discharge of blood the Infus. Rose with a
few drops of Laudanum will be extremely useful.
The Carb. Acid Gas combined with stimulative Agents
will be a useful remedy. Quassia is sometimes useful, par-
ticularly when there is sickness. We must be cautious in
the use of Opium, as Constipation is a frequent symptom
they will be useful in correcting Diarrhea, but this Dr. C.
has found it moderate low Delirium when given in small
quantities. The Diarrhea must not be stopped altogether,
the Opium must be joined with Remedies which detensure
the skin, particularly when they are cold & collared, Arsenic,
Rub. Spic. C. is a good form: Chalk combined with small
quantities of Calomel has been found frequently to check
Diarrhea & any astringent may in the Bowels, Camphor
few grains may be given with Sassafras, or Rhododendron
rubbed down with Olive Oil & made into a Pill, two pills
at this period will be useful adjuvants, more so than Blisters
they stimulate without causing a Discharge.



231. General preliminary sketch of the Sanguiferous System:—Arteries chiefly composed of *elastic* and of *muscular* coats, which, though in a certain degree *antagonists*, yet co-operate in carrying on the circulation.—Relative proportion of these two coats alters as arteries diminish in size.—Reasons for believing, that the ultimate *veins* also possess a certain degree of muscular structure.—Future application of these data. (236.)

232. Universal property of living muscular fibre, to contract upon the application of various agents, collectively denominated *stimuli*.—Question,—whether susceptibility of muscular fibre to receive impressions from *stimuli*, be *inherent* or *derived*,—not necessary to the present subject;—but all susceptibility evidently dependant on nervous influence, and the latter opinion most probable in Man, and the more perfect animals.

233. Muscular fibres of arteries, in common with all others, are excited to contract by every agent, whether *mechanical*, *chemical*, or *specific*, that can be applied to them:—but THE BLOOD their *peculiar* and *proper* stimulus,—and its action threefold.

234. Generation or evolution of animal heat, the most splendid physiological discovery of the present age.—Short recapitulation of the theory (77-81); and the conclusion of its being a *vital* as well as *chemical* process, shewn to be additionally confirmed in Inflammation.

235. In healthy state, stimulus of blood and susceptibility of arteries exactly balanced.—*First* effect of over-stimulus on muscular fibre—*excessive contraction*;—*second* effect—proportional *fatigue*, and *relaxation*.—Application of this to the case of inflammation excited by *external* stimulus (229.)

236. Every inflammation a state of *capillary congestion*, greatest at central point, and gradually lessening as we recede from this.—Inflammation always begins in capillary vessels and smaller branches;—this accounted for from their structure, (231)—and shewn to be a wise provision.

237. More modern doctrines of Inflammation examined.—Theory of Dr. Cullen;—supposes the proximate cause of spontaneous inflammation to arise, from *an unusual quantity of blood being THROWN upon the smaller vessels, exciting increased action in them, which is supported by Spasm on their extremities.**—Spasmodic constriction of arteries shewn to take place in certain states of inflammatory disease affecting the sanguiferous system at large:—this, however, not on the *extreme* arteries, but on the larger vessels and their branches;—and not of uniform occurrence even on them.—Still less evidence of spasm on extreme arteries or veins when inflammation altogether local.—Conclusion against the doctrine in question.

238. Dr. Fowler's theory of inflammation—as consisting in *increased action alone*, †—more simple than Dr. Cullen's; and sufficiently explains both the phenomena and treatment of *tonic* inflammation,—but not applicable to the opposite kind.—Does not require a separate consideration;—as the establishing *two forms* or *kinds* of inflammation, necessarily supersedes this as a *general* doctrine.

239. Latest theory—making Inflammation consist entirely in a *weakened and over-distended state of the capillary arteries*,—referred to Dr. Lubbock and Mr. Allen

* *First Lines of the Practice of Physic*, § CCV LV.

† *Tentamen Inaug. Quædam de Inflammatione complectens*. Auctore RICARDO FOWLER. Edin. 1793.

as its authors ;—but published by Vacca in 1765, and subsequently maintained by Winterl and Callisen.—Examination of it as delivered by Dr. Wilson.*

240. Takes for his example a state of *advanced* inflammation, in which the capillary arteries already *considerably dilated*, and of course *muscularly weakened*.—But *debility* and *increased action* not incompatible :—familiar illustration of this.—Action, however, not progressively increasing whilst inflammation continues ;—often arrives at greatest height very soon, and afterwards declines more or less rapidly according to circumstances :—but no period of inflammation wherein *action* not present.

241. Dr. Wilson's trials on frog's foot with Alcohol, shewn to be inconclusive, from the torpid nature of the animal, and the *sedative* operation observed from this article in the experiments of Dr. Monro.—This virtually admitted by Dr. Wilson himself in the instance of the frog's heart.—The result of his experiment on the mesentery of a rabbit, equally inapplicable, from the degree of mechanical violence used, and the well known effects of contusion in various injuries.—His objections to Dr. Fowler's experiment on a rabbit's ear, examined, and proved to be futile.

242. Account of experiments made to determine this question.—*First* effect of strong stimulus, increased velocity of circulation ;—*second* effect, great distension of vessels, and comparatively slow motion of blood in them ;—but still rapid in the adjoining, and as yet undistended capillaries :—the same acknowledged by Dr. Wilson.—Application of this to the case of progressively extending

* *A Treatise on Febrile Diseases*, by ALEX. PHILIPS WILSON, M. D. Vol. iii.

inflammation.—Proofs of the blood not being stagnant during inflammation, in warm blooded animals.

243. Falsity of the theory in question (239-41) finally demonstrated, by shewing the mischief to which it would lead in practice.

244. Short recapitulation of the several doctrines examined above (230-7-8-9), and general conclusion respecting them.

245. Inquiry into the cause which *more immediately* and *chiefly* maintains the circulation through the capillary Arteries and Veins ;—and arguments to shew, that although *intimately connected with* their muscular *substance*, it does not *absolutely depend upon* muscular *motion*.—Facts demonstrating,—That a muscle may have its contractile *nisus*, or effort, greatly augmented, and its *power* thereby impaired, without actual shortening of its fibres.—Application of these principles to the phenomena of Inflammation ;—and attempt to explain them upon—A CHANGE IN THE RELATIVE NEURIELECTRIC OR GALVANIC STATE OF THE EXTREME VESSELS, AND THE PARTICLES OF BLOOD.

REMOTE CAUSES OF INFLAMMATION.

246. These various, and even opposite ; but all either *directly* or *indirectly* produce *increased action* ;—all therefore either *directly* or *indirectly stimulant* (232).—Abstract nature of *stimulus* obscure ; but its operation shewn to be *primarily* and *essentially* upon the nerves, and, *cæteris paribus*, proportioned to their number and sensibility in any part.

247. Universal effect of *direct stimulus* within certain limits—to increase the *susceptibility* or *feeling* of the stimulated part ;—and this increase proportioned to the

Let them be the first to see
the light by the new well

249. The only safe means of restoring a heart that is
frozen is by ^{supplying} ~~applying~~ stimulus, which is best done
by rubbing the part with snow, by which its vitality
will be preserved.

original sensibility, and the degree of stimulus applied:—whence during it, even the natural and customary stimulus of the blood becomes morbidly great.—Prodigious increase of sensibility under inflammation, shewn in certain membranes:—and Haller's conclusion respecting the seat of pain in such cases, refuted.

248. Where *direct* stimulus applied in excess, the remote or exciting cause of inflammation obvious. But inflammation, both topical and general, often follows the application of *Cold*, and often arises *spontaneously*:—how then account for these?

249. Apparent dilemma here; but the fact perfectly reconcileable with true Physiology and Pathology;—and both *Inflammation* and *Gangrene* from Cold, satisfactorily explained.—Illustration in the case of a naval officer.*

250. Spontaneous inflammation alledged by some to arise from *irregular distribution of blood* (237); this cause, however, both gratuitous and inadequate.—Inflammation of considerable organs during fever, generally attributed to particular *weakness* of them;—but *weakness* shewn to be a term of vague meaning, as accompanying states of the body very differently disposed with respect to inflammation.

251. Another explanation offered, and *primary cause* traced to change in Nervous Influence.—Application of this shewn to be universal.—Determination to particular parts or organs, however, no doubt *aided* by constitution, —prevailing epidemic influence,—peculiar Contagion;—and perhaps by other circumstances not easily accounted for.

* See *Observations on Apparent Death, &c.* By JAMES CURRY, M. D. F. A. S., &c. 8vo.

DIVISION OF INFLAMMATION INTO TWO PRINCIPAL KINDS, VIZ. THE TONIC AND ATONIC.

252. Preliminary observations on *Power* and *Action* in the living body (137); and farther illustrated on the principles laid down in par. 245.

253. Application of this distinction (252) in the example of Ophthalmia; where both kinds frequently take place during the progress of the same attack, only varying in their relative degree.—*Atonic* inflammation the result of repeated attacks of the more *tonic* kind; but inflammation often *atonic* from the first:—striking instance of the latter suddenly occurring in India and in Egypt; and occasionally observed in this country.

254. The difference of inflammation, as to *kind*, farther proved from the mode of cure found most appropriate to each.—Subdivision of *atonic* inflammation as attended with *excess*, or *defect* of sensibility.—General conclusion.

EXPLANATION OF THE SYMPTOMS OF INFLAMMATION.

255. PAIN;—cause of it;—very different in *kind* as well as in degree in different cases:—distinctions of it as *acute* or *obtuse*,—*continued* or *remitting*,—*lancinating*, *pulsatory* or *throbbing*,—*tensive*;—*burning*;—*smarting*.—REDNESS;—why *always* present.—TENSION and SWELLING;—under what circumstances each of these more especially occurs.—HEAT;—its actual increase shewn to be little beyond natural temperature of internal parts;—sensation of it fallacious.

256. Difference in the proportion of these symptoms respectively, in the two *kinds* of inflammation.

OF THE SPECIES OF INFLAMMATION.

257. Inflammation divided by Dr. Smyth, into *five*

255. Pain is supposed to arise from some change in
the nerves, but what this is we cannot tell.
In the Schirrus inflammation of Glands the Patient com-
plains of lancinating pain.
Redness is owing to the area of the vessels which do not usually
only receive the colourless part of the blood, becoming irritated
when they contain the red particles.
When Effusion occurs in Cancerous Membranes it does not
produce swelling, but the sensation of tightness, this is the
case with the Pinitum; in the Cellulæ Membranes it is
attended with considerable puffiness & swelling.
We sometimes find the Temperature increased 6 or 8 Degrs
above the Natural Standard, this must be certainly owing
to the operation of the Vital Energy. In Typhus Fever we cannot
ascribe it to be owing to the increase of the Vital Power, but
to an alteration in those powers which regulate the Evolution
& Flow; it must therefore be ascribed to the Nervous Energy.



257. *Synovial Inflamm.*: generally terminates
in Resolution, but when it particularly attacks the
Cellular Membrane, it sometimes ends in suppura-
tion, but however this is rare.

In *Dia. Membr.* it is generally accompanied
with increased secretion, sometimes with that of the
but more commonly with no secretion.

In *Acute Membr.* it usually terminates in
suppuration, but sometimes with the formation
of a new membrane, as in the Larynx in Children.

In those parts which are liable to the Rheumatic Inflam-
mation, it usually terminates in the effusion of Serum
sometimes, the exudate in suppuration, but the Inflam.
frequently ends in the deposit of solid matter.

258 In most specific Inflammations the general of the System is kind, but this is not always the case, as we observe in the different forms which Small Pox will assume in Children of the same Family.

261 In general Adhesion must be considered as a local Inflammation, but when it takes place in Pleurisy Pleurisy is not so, as it is produced by the effusion of coagulable lymph which does not always become organized, and productive of many unpleasant symptoms.

262 Meadway, found that the fluid effused differs from the natural secretion, sometimes this watery, & occasionally mixed with curdy or cheesy matter, or gelatinous, &c. In the former case it is the same as the natural secretion, but in the latter it is mixed with coagulable lymph which will be found the same as the natural secretion, when the effusion is secondarily mixed with it. It is generally accompanied with considerable

species, as occurring in parts differing in structure, viz. in the SKIN—Erysipelatous;—in CELLULAR MEMBRANE—Phlegmonous;—in DIAPHANOUS MEMBRANES;—in MUCOUS MEMBRANES;—in MUSCULAR FIBRES—Rheumatic.*—But all these parts shewn to be liable to simple phlegmonous, or suppurative inflammation; and the above distinctions to be neither correct, nor practically useful.

258. *Structure of parts rather occasions particular termination, than specific difference in nature or kind of inflammation.*—The *Species* chiefly owing to the nature of the *exciting cause*,—as *Variolous*,—*Syphilitic*, &c.;—or to some peculiarity of constitution or habit,—as *Gouty*,—*Scrophulous*,—*Cancerous*,—*Erysipelatous*, &c.

OF THE TERMINATIONS OF INFLAMMATION.

259. The terminations of inflammation reducible to *five* heads, viz. *Resolution*,—*Adhesion*,—*Effusion*,—*Suppuration*, and *Gangrene*,—*Scirrhus* also reckoned by some among the number; but although sometimes a *termination* of inflammation in glandular parts, yet oftener *precedes* and *causes* it.

260. RESOLUTION.—Origin of the term among the chemical and mechanical physicians;—its meaning as now used.

261. ADHESION;—in what circumstances it chiefly occurs;—Mr. Burns's criticism respecting it,—refuted.

262. EFFUSION;—almost peculiar to cavities lined with smooth diaphanous membranes;—variety of the matter effused in different situations and circumstances.

* *Medical Communications*, vol. ii. Art. xix.

263. SUPPURATION ;—occurs in every vascular part except the tendons.—Phenomena accompanying it ;—alteration in degree and kind of pain ;—diminution of heat ;—change of colour in the skin, when near the surface :—rigors, —these perhaps rather a collateral symptom, than direct consequences of suppurative change ;—circumstances under which they especially happen.

264. Enumeration of the principal opinions respecting Pus :—1. BOERHAAVE'S—that it was made up of the various fluids effused into wounds, mixed with a portion of the solids dissolved and slightly putrid, and united into an uniform, white, thick, glutinous, and oily fluid.* —2. GRASHUIS'—that it consisted of various heterogeneous particles both solids and fluids, *but chiefly of the fat*, mixed together, and undergoing an incipient putrefaction under stagnation and heat.†—3. SIR JOHN PRINGLE'S—that it is formed by a fermentative process from the serum effused into ulcers, while the thinner parts are dissipated by the heat.‡—4. DE HAEN'S,—that it is generated in the blood, from a peculiar matter formed there, not only under certain general states of disease that are *not inflammatory*, but in some persons even from a *natural diathesis*.§—5. DR. MORGAN'S,—that it is a new secretion, produced by a peculiar action of the vessels :||—this opinion commonly attributed to Mr. John Hunter as the original author.—6. MR. BURNS'S,—that Pus is formed by an operation

* BOERHAAVE, *Aph.* 206. 387. 332.

† GRASHUIS, *De Generatione Puris*, cap. 1. p. 18 et 22.

‡ PRINGLE'S, *Obs. on Dis. of the Army*, App. p. lxxxii. ii. 6th edit.

§ DE HAEN, *Ratio Medendi*, vol. i. cap. xi. *De Puris Generatione*.

|| *Tentam. Inaug. De Puris Confectione*, Auctore JOHANNES MORGAN. Edin. 1763.

was.
263. The Pain which was before death becomes dull & throbbing; it is attended with considerable depression of the heart, with a prominence in the middle, discoloration of the skin, & exhalation, the Pulse which was before hard & strong, now becomes soft & slightly irregular. Rigor is not alive, as an attendant, as symptoms of typhus, with sometimes fever in the living, but a few hours without the rigor, but it generally accompanies active inflammation.

If Dr. Bowdler's opinion was correct, we should find that the red tubules would be mixed with the blue, also that it would be better, from the interposition of the solid portions, & their becoming disorganized, now there is not the case, for the blood has become white until it is exposed to the air. Generally the death is more from abscesses of the brain, than infarction, but Brown has not mentioned this.

2. Pus by no means most common in those parts, in which there is plenty of adipose substance, and we find that wherever it is formed it, characteristic properties are the same,

3. Fermentation we know does not take place in the Body, but he does not say that it does, see 265.

6 This is the Lord Home's opinion & Dr. Thompson seems to incline towards it.



267 In gangrene we find that there is diminished
power in the constitution & diminished action in
the part, we are sometimes able to push it to stop it
by stimulating the system, but it is more commonly
prevented by suppuration, sloughing.
Sometimes gangrene comes on of itself without
previous inflammation. Scirrhous heart is generally sup-
posed to be owing to a diseased state of the arteries
leading to the heart, we sometimes find that the large
arteries are ossified which is felt by passing the finger
over them. Sometimes it is in consequence of the valves
of the heart being ossified; when it is not owing to any
of these causes it may generally be stopped by
large doses of Opium.

When it occurs in Typhus Fever it is generally caused
by pressure, thus we find it on the loins & scapular
stale more commonly from neglect of cleanliness,
sometimes arising from neglect of ~~cleanliness~~ exposure
to cold as the patient getting out of bed and standing
on the cold floor.

When inflammation takes place in Tendons after lacerated
wounds it is very likely to terminate in Phlegmon.
in other words

6. we find that the urticariae particles differ according to the nature of the part, but this is similar in all Parts.

265 We do not find Pus globular when it is first thrown out, but gelatinous, & it requires sometime to induce this change, full 18 Minutes when exposed to the Air, this sets aside Sir D. Thompson's & Dimples theory seems to be the most rational, but is not countenanced by Sir D. Home & Sir B. Hall & is strengthened by their Experiments.

266 In the Scab, where there is great debility and in Scrophul. Constituti^o we find Pus mixed with curd matter, more particularly in Plands going into Ulcers when in the cavities of the Body it is Pusky. In the Scrophulous Diathesis we often find the surface of the Ulcer covered with Blood, and we sometimes find where there are several Abscesses on an organ that the matter varies in each, this was the case in a Patient in whom Antiseptic opened an Abscess in the Liver.

267 When it occurs in a part under our view in consequence of the sudden cessation of violent Inflammⁿ we find a great change take place, the part which was before red now becomes livid, there is swelling & puffiness, the Heat is much lessened & the Pulse becomes weak, soft and irregular, there is great prostration of strength, there is generally a sudden cessation of pain & peculiar appearance of the countenance, we cannot always rely on the Pulse for sometimes he comes natural when Gangrene is about to take place, sometimes frequent & irregular, but in general weak and soft.

of the living principle, from the *interstitial fluid*, and the *nutritive particles*. *

265. Strictures on some of these opinions.—Mr. Home's arguments for Pus being a secretion †—examined ;—and his position disproved from his own experiments.—Mr. Burns's idea (6 *supra*) shewn to be a gratuitous assumption, neither admitting of direct proof, nor countenanced by facts.—Remarks on the objections made to Sir John Pringle's theory,—and their irrelevancy pointed out.

266. Conclusion,—that Pus is not a secretion, but acquires its characteristic properties by a spontaneous change taking place, under the influence of heat, in a mixture of Serum, and of Lymph, or rather Albumen, in certain proportions, after quitting the vessels.—Variety of appearance which the effused fluid assumes, explained from the different proportion of its ingredients, and the circumstances under which it is poured out :—whey-like, —flakey, —curdly, —clotted or cohesive, —puriform, —purulent.

267. GANGRENE and SPHACELUS—defined,—and their relation to each other shewn :—may be either *direct*, or *indirect*;—distinction between these exemplified in senile mortification,—in gangrene during and after Typhus fever,—after Erysipelas,—after contusions,—lacerated wounds,—or violent Inflammation.—In what parts each kind respectively most frequent.—Signs of its taking place, accordingly as it is external or internal.

268. SCIRRHUS;—peculiar to glandular parts?—oftener precedes than follows inflammation ;—and when

* *Dissertations on Inflammation*, by JOHN BURNS, Surgeon, vol i. p. 404-5.

† *A Dissertation on the Properties of Pus*, by EVERARD HOME, F. R. S. 4to. Lond. 1788.

the latter, something peculiar in the *species* of inflammation, often connected with constitutional disposition (258).

GENERAL CURE OF INFLAMMATION.

269. This resolves itself into a single or a double indication, according to the *kind* (252-4) of inflammation present.

270. Circumstances whereby to determine the general character or *kind* of the inflammation, collected from—the patient's age,—constitution,—and habit of body;—the origin,—progress,—and present state of the disease;—and the effects of the remedies (if any) already employed.

271. The CURE OF TONIC INFLAMMATION, or *Excessive vascular Action with considerable Power*,—will consist in—employing such means as *directly* tend to lessen the excessive action;—which is done by—A. removing, as far as it is practicable, those external causes, whether *mechanical*, *chemical*, or *specific*, that have been applied, and still continue to act;—B. lessening, to a certain degree, the stimulus arising from those agents that are natural, viz. the Blood, and Animal Heat,—by Bloodletting,—by Cold applications;—C. diminishing the morbid sensibility and irritability by sedative remedies, e. g. Preparations of lead,—Digitalis?—Opium? &c.—Remarks upon the extent to which several of these means (B and C) are to be carried,—with directions for their proper use.

272. In the CURE of ATONIC INFLAMMATION,—or *Increased Action with inadequate Power*,—beside employing the means specified above (270) and occasionally others which have a peculiar sedative operation

270. When Inflam. occurs in the early period of life, it is generally of the Tonic kind, & find that it rapidly increases & very soon terminates in Death if proper means are not used to prevent it. In the middle period the character of the Inflamⁿ is generally Tonic & we find action & power nearly balanced; while in Age it is usually of the Atonic kind & accompanied with diminished Power.

271. In fact, that are inevitable and of importance to life we generally find that Inflamⁿ rapidly increases and soon runs its course, therefore requiring our utmost effort to suppress it.

B. The quantity of Blood to be taken away & the propriety of its repetition must depend on the system, constitution of the Patient, the effect on the Pulse, the appearance of the Blood, & the degree of pain in the part.

When there is Inflamⁿ of some internal Organ it is doubtful how far it will be safe to have recourse to cold applications.

& Topical will be useful adjuvants to keep a guard over the symptoms, but it will not be found to suppress Inflamⁿ very much. Where there is great Tuitability the exhibition of a good dose of Ipecac after bleeding will be attended with great advantage.

Purgatives, especially opiate, particularly the saline Purgatives, by producing a copious discharge from the bowels.

altho the Blood be covered with a buffy coat, still if it be not cupped, we are not to push depletion further (unless other causes render it necessary) for this is an sign that debility is coming on.

Sedatives may be given so as to keep up humors & they will be found extremely useful after B.L. & the same may be given in the common Doct^r as being a powerful Repellent.

272. Warm Applications as the Uterus of *Uterus*
a Spt of Wine, also Mineral of *Uterus*,
as it is to use the Uterus of head or Sulphate of Lime.
At the same time that you are using Applications
to the Parts, you should give those Remedies which re-
fresh the Strength, as begettable Remedies; sometimes it is
necessary to give Stimulants at first, but we should be
cautious in doing so, but in old Habits generally obliged
to give Stimulants. In Carcinoma & Dyscrasia
we are obliged to support the powers of the constitution
but in the latter there it requires caution.

See find that after repeated attacks of *Cynanche* Trache-
itis the Inflammation is generally of the *Chronic* form.

In general the application of head to *Dyscrasia*
will be improper as it is very liable to produce
fasciæ, but in the active stage in a full Robust
(in the Country) it may be applied without any ill
effect.

275. It will be necessary when suppuration takes place
that the treatment should still be that of the Antiphlo-
gistic plan, but when the Ulcer is opened or bursts, we must
give Remedies to support the Strength.

In Scrophulous the Remedies which give most relief
are those which support the power of the Body, as, the cold,
Baths, Bark, mineral Acids, also the Minerals
of Bauxite, & powdered wood to the Uterus. The Minerals of Soda
is used with advantage as a local application in the form
of Brine; we must be cautious how we give Mercury
to cure Syphilis in a Scrophulous Habit.

Mercurial Acid will not cure Syphilis, but it will suspend
its action for a time. Astringent of Carbonic Acid has
directed on a Scrophulous Ulcer that is fatted will correct
this state. The Anti-Mineral Acid has been found
useful in Scrophulous.

adapted to particular *species* of the disease,—the *power* of the vessels must be *supported* or *increased*, by the local or general use of astringent and tonic remedies.—The principles laid down in par. 136-7, and 159, illustrated here by cases both of local and general action, and applied to the treatment of *atonic* inflammation.—Variation necessary, according to the *stage* of the disease,—or to its being attended with *increased* or *diminished sensibility*, (254).

273. Both *kinds* of inflammation subject to considerable variety in *degree*;—and the one or the other character predominating, according to—the greater or less strength or *power* of the vessels to maintain themselves under a state of increased action,—the original or acquired sensibility of the part affected,—and, the nature and force of the exciting cause.—Difference of treatment arising out of these particulars.

274. The treatment of *Specific Inflammations*, such as the Gouty,—Erysipelatous, &c. as far as it differs from that of SIMPLE INFLAMMATION, will be considered under their respective heads.

TREATMENT OF SUPPURATION.

275. This, as far as respects local applications, comes under the province of Surgery; but *internal* remedies often necessary; and these are either such as increase the tone and vigour of the whole system, or correct specific morbid dispositions,—as the scrophulous,—syphilitic,—cancerous, &c.—Remarks on certain remedies employed for these purposes respectively.—Sea-Water bath, tepid or cold;—Cinchona;—Alcalies;—

Cicuta. — Mercury ; — Nitric Acid ; — Sarsaparilla. — *Comp.*
 Arsenic ; — Carbonic Acid Gas, &c. *Steel.*

TREATMENT OF GANGRENE.

276. Will in part depend upon the causes inducing it,—and its being *direct* or *indirect* (267); but the general indications are,—1st. to support and increase the *power* of the vessels which yet retain the principle of life ;—By moderate warmth,—nourishing food,—Wine,—Cinchona,—Carbonic Acid,—Camphor,—Opium,—Musk and Ammonia, &c. :—and—2d. to prevent or retard the septic dissolution of the sphacelated parts. —By Carrot, Turnip, or Parsnip poultice,—fermenting cataplasm,—Nitrous Acid lotion,—Oxygenated Nitrous Gas,—Camphor dissolved in Oil of Turpentine?—Varnish of Pitch or Wax in ditto.

TREATMENT OF SCIRRHUS.

277. Ambiguity of the term *Scirrhus*, as often applied to express specifically different kinds of morbid hardness in glandular parts.—Necessity of investigating the particular kind of induration therefore, in order to render the treatment successful, or even safe :—illustration of this in Cancerous,—Scrophulous,—and Syphilitic indurations.—Genuine scirrhus perhaps incurable in the advanced state ; why so.—Remarks on certain remedies usually employed against Scirrhus :—Cicuta ;—Belladonna ;—Arsenic ;—Muriate of Barytes ;—Electricity ;—Galvanic aura, &c. *Iron. Camphor. Perfume. Subcarbon.*

2d The Application of succulent ointment will be of
considerable use in preserving the power of the bowels
to, then, in the Bile, &c. Rubric will also quiet the
irritability of the Stomach & enable it to bear more powerful
remedies. Opium should be given in small, frequent doses
of $\frac{ij}{\text{gr}}$ - in every four hours until the Jaundice is stopped.

Dr. Ch. has found when the Pneumonia, Wides & Opium have gained
the exhibition of Marsh & Camomile, (Dr. M. gives) either
with or without Opium has been very useful & some times
has a stop to the Jaundice, *Infusum* may be given with
advantage, ~~particularly~~ as it does not prevent the Patient
taking the necessary Diet. Sulphuric Ether ought not to be
used. Poultices will tend to relax the parts and
help of the Pharynx if continued too long.

In Jaundice are found covering the Thorax thus
helps to prevent the action of the Air, as a warmth of
Pitch & Honey, will prevent it increasing.

A Charcoal Poultice will be found to check the
Pharynx, and correct the aptness of the





201. If the Symplicia attack the investing Mem-
brane of an organ, the Pulse will be full & hard, if the
Paraschematous substance, on air & Symplicia, but in
absence of the Symplicia it is always small & living.

202. A familiar example of this is the pain in the
throat in Symplicia, also the disturbance of the
stomach in Symplicia; the Symplicia is spreading in
the lungs and the Patient will only complain of a tickle
sensation in the throat.

OF THE PHLEGMASIÆ,

OR INFLAMMATION OF PARTS, WITH GENERAL FEBRILE STATE.

278. Sometimes from the *extent* of the local inflammation,—from the great sensibility of the part affected,—or from its importance in the constitution, the whole Arterial System partakes of a corresponding state:—and therefore demands attention, as well on its own account, as on that of the part primarily affected.

279. At other times the *general* inflammatory affection arises from the same exciting causes which occasion the *local* one; and comes on along with, or even precedes it.—This more especially what constitutes the PHLEGMASIÆ; and its application of importance in directing the treatment.

280. GENERAL CHARACTER OF THE PHLEGMASIÆ;—Disturbance of some internal function, with local pain, and symptomatic (?) Synocha (175);—blood buffy or sisy;—urine red;—tongue white;—heat sometimes considerable, but often moderate;—pulse quickened, and generally hard; but sometimes full, at other times oppressed or obscure.

281. Variation in the symptoms accordingly as the disease partakes especially of the *tonic* or *atonic* form.

282. The *seat* of the pain *generally* directs to the part or organ particularly affected;—but this occasionally fallacious. Examples of both true and false reference by the patient;—and cautions necessary to guard the practitioner against mistake, in a point so important in regulating the plan of cure.

TREATMENT OF THE PHLEGMASIÆ IN GENERAL.

283. This will depend upon the distinctions already laid down with respect to the *degree* and *kind* (252, 6) of inflammatory state present,—upon the sensibility and importance of the organ chiefly affected;—and, upon the relative proportion between the *local* and the *general* affection, together with their respective priority of occurrence (278-9).—Illustration of these by examples.

284. TREATMENT WHERE THE INFLAMMATORY ACTION IS OF THE TONIC KIND :—

A. BLOODLETTING, general and local;—circumstances determining its extent, as collected from the patient's strength,—age,—habit of body,—mode of life,—state of pulse,—urgency of symptoms;—but much less necessary than generally supposed, if other means duly employed.—Appearance of blood drawn, a doubtful indication :—danger of the Boerhaavian doctrine shown here.

B. BLISTERS ; their use in this case explained.

C. Application of Cold, — doubts respecting it :—regulation of temperature.

D. PURGATIVES,—different kinds required at different periods of the disease.

E. ANTIMONIAL DIAPHORETICS —how to be regulated.

F. CALOMEL and OPIUM combined :—idea of counter irritation refuted :—principles upon which their operation may be better explained,—illustrated by actual cases.

G. DIGITALIS—to what stage of this form best suited.

285. TREATMENT WHEN POWER DEFECTIVE.—Causes particularly giving rise to this form;—marks for ascertaining its degree.—A. Cautions respecting

203. You should observe whether the Local or General Effluvia begins first, for when the former is the case the latter is generally left behind.

A. Instead of the Blood being effused & buffy, the Consideration of the appearance of the Blood viz. the repetition of it will be largely done.

We must not always be guided by the appearance of the Blood, for it is sometimes covered with a coagulum a few hours before Death.

B. When there is much Heat of the Skin & fullness of the Pulse, Blesters by the Stimulus which they produce will be prejudicial, but when these symptoms subside after it, they will be useful.

C. The Application of warm Fomentations in Local Effluvia will be found advantageous & prove grateful to the Patient.

D. Purgatives must be given with caution in Influenza of the Bowels, for if given too early they will aggravate the Disease, but in most Paliperadise they will be productive of great advantage, those of the Saline nature should be given at first.

E. Ant. Drops given in small doses so as to keep excretion on the Skin, like combined with them will be useful.

F. Calomel & Antimony will be found the most beneficial relaxing Drops we possess, &c. recommend it in Influenza of the Lungs & Bowels, but it cannot be given when there is excretion in the latter organs.

G. Diastol may be given after the Influenza has been relieved by Calomel & Purgatives, to lower the Pulse. If it produces sickness or runs off by the Bowels, it will be useless to continue it.

C. The application of Cold to the Head in Phrenitis, will be found especially serviceable, but in Effluvia of the Lungs or Bowels the application of Cold to the part would be extremely prejudicial.

D. The A. D. may be given with great advantage so as to excite & keep up nausea.

E. C. C. will be extremely useful where there is any disorder of the Biliary secretion, or constant & tedious sickness.

28. The disease given rise to the disease, and
in the case, Pontiac, Epidemic influence, & weak-
ness of the constitution, either excess in living, inhabiting
crowded districts, ^{now} particularly frequent, attacks
of influenza. It is known by the Pulse being full
& strong, the head, & the pain in the feet being less-
ened. It is a disease of the lungs, and is

A. If we have recourse to general bloodletting the
 parts will soon run into a state of Gangrene,

So we can not therefore principally rely on local bleeding with the Cupping Glass. 6. When there is any remains of tenderness, Blisters will remove it. sometimes they may be employed alone in this form of the disease.

D. Papsive Inflans. is often kept up by accumulation
in the Bowels, therefore Attentive Purgatives are espe-
cially necessary as Calomel Jalap and Rhubarb.

2: The big American. Best the best draft. When the Power is still more defective we must give other, length & superabundance. I. Colonel the he given alone when the Boulds have not been cut on, in small Doves, but when there is much richness, or a teasing state of the Boulds it may be joined with Specimen.

2. The Warm Bath may be had recourse to with great advantage; Warm Emmentations to the feet will also be useful.

287 The Patient complains that he has some
dust or sand in his eye - the discharge of Tears
produces a stinging & burning Sensation.

288 If gonorrhoeal Matter be applied to the Tunic
adnata, it does not produce so violent ^a state of the
ophthalmia, as the sudden suppression of the gonor-
rhoeal Discharge.

general bloodletting.—B. Local bleeding—C. Blisters—D. Purgatives,—what kind especially useful.—E. Mild diffusive diaphoretics: combinations affording these,—F. Calomel joined with Opium.—Operation of E. and F. separately and conjointly.—A plan more or less tonic necessary throughout, but especially towards the end. (272).

PARTICULAR PHLEGMASIÆ.

OF OPHTHALMIA, OR INFLAMMATION OF THE EYES.

286. Usually divided into two species; 1st. as situated in the membranes of the eye (*Ophthalmia membranarum*, CUL.)—2d. as situated on the margin of the eyelids (*Ophthalmia tarsi*, CUL. and *Psorophthally* of Mr. Ware.) The second species often a sequel of the first; but sometimes precedes and causes it. The division of Ophthalmia, however, according to the *kind* of inflammation (253), shewn to be more comprehensive and useful.

287. SYMPTOMS OF TONIC OPHTHALMY;—Pricking or shooting pain in the fore part of the eye,—redness of the *tunica adnata*,—increased sensibility to light,—generally with discharge of tears:—occasionally sharp pains darting to the bottom of the eye, and through the head, with considerable pyrexia (*Ophthalmitis*).

288. CAUSES. Constitutional irritability of the eyes.—Mechanical violence from blows, &c.—irritation from foreign bodies, inverted hairs, (*Trichiasis*) &c.—Cold, especially applied with partial current of air;—Intense Light;—particular state of the atmosphere during certain winds;—Peculiar Contagion (*Egyptian Ophthalmia*);—Suppressed Gónorrhœa?—Remarks on these, and their respective operation explained.

289. CURE OF TONIC OPHTHALMY;—Exclusion of light:—Bloodletting, —various modes of it, with directions for their choice and extent:—Purging,—what cathartics especially useful:—Cold applications;—Digitalis?—Belladonna?—Diet and regimen proper.

290. SYMPTOMS OF THE ATONIC OPHTHALMY;—Turgescence and redness of the vessels, with comparatively little pain in general. (254):—This kind often combined with the second species (2d. 286), or ends in it.—When the inflammation is of the crystalline or Erysipelatous species, the cellular membrane of the eyelids and neighbouring parts, is also affected.

291. Description of the Purulent Eye of Young Children; and inquiry how far caused by, or connected with, Leucorrhœa in the mother.

292. THE PREDISPOSING AND EXCITING CAUSES of the *Atonic Ophthalmy*, besides those mentioned above (290), are—Scrophulous habit,—Small Pox;—Measles;—Dentition;—Exanthematic metastasis;—Tinea capitis;—Mercurial irritability;—Syphilitic taint?—Fatigue of eyes;—Smoke or other acrid vapours;—frequent Intoxication.

293. TREATMENT OF ATONIC OPHTHALMY:—Local bloodletting in different modes;—blisters.—Occasional purging with particular cathartics.—Opium.—Sudorifics—Emetics.—Various astringent and stimulant applications, consisting of preparations of Lead,—Alum,—Zinc,—Copper,—and Mercury;—Vinum Opii;—fomentations?—Ol Terebinthinæ, Riga Balsam;—Electricity;—Cicuta;—Cinchona;—Cold bathing—local and general.—Errhines.—Issues—Setons.—Remarks upon these, and upon some celebrated empirical applications.

287. B.S. must be had recourse to very largely in this Disease & carried to a great extent, and it should be continued until it makes some impression on the Disease, & it may be followed by local bleeding.

F. C. prefers taking it from the Temporal Artery, it has been recommended to open the vein leading to the same. Caution. Caution so as to keep up haemorrhage for some hours with, before a good auxiliary to B.S. or they will prove ineffectual when B.S. cannot be carried to any extent from the state of Perturbation. When the inflammation is kept up the application of leeches to the scalp followed by repeated doses of Calomel, given by the tongue. But, will be highly beneficial.

Purgatives, the saline Purgatives should be first given so as completely to unload the Bowels, followed by the more Purgations. Cold Affusion will be most judicious. Warm infusion of Digitalis as a Remedy to relieve a heavy pain after the active treatment. x

Belladonna will be found to prevent the adhesions which would take place from effusion of lymph. Digitalis may also be given internally after B.S. to lessen the action of the Pulse

288. "Paddening" a different appearance of the eyelids, viz. that of a network over the eye; while in the active stage it looks like a piece of raw flesh. The swelling of the eyelid which often takes place may speedily be removed by a leech.

293. It will be found to aggravate it, but local
bleeding will be necessary to relieve the congestion of
the vessels, some proper ointment to the eyelids, par-
ticularly when the conjunctiva is affected.
Blisters sh^d be applied over the scalp, & stimulating
Purgatives will be proper, Scam. & Hydr. subm. will
be the best for Children. Opium in the form of Dover's
Powder may be given in Chronic Ophthalmia, preceded by
L.B. When we cannot deplete an Emetic may be
given so as to unload the Stomach & produce its
general effect. such as Ipecacuan: with the same in strong
An Ointment containing cast of Zinc formed by deco-
poring Cast-offed by itself of Zinc, will be a useful
application, If we want a more powerful Acting
a solution of Salutar & Zinc will be best, it will be sti-
mulus useful with a few drops of Spt Camph: when there
are specks on the Cornea we use a more powerful
acting we may add a few grs of Sulph of Copper,
The best Hydr. Lint. Lint. is a good application
and may be dropped into the eye, it will produce
pain but afterwards affords considerable relief. A strong
solution of Tobacco produces the same effect and in some
cases it affords more beneficial. Poppy fomentations
where there is much pain & irritability. The Tumes-
of Bl. Inflammation in the Chronic form which occurs in
Scroph. Constitution also when it has been brought on by
looking at small objects. Cicuta as an anodyne is
sometimes be found useful. Cinchona given in large
Doses will occasionally put a stop to it, is much recom-
mended in Scroph. Ophthalmia. Cold Bathing is a very powerful
remedy in the Chronic Habits, also Cold Applications to the
eye in the commencement. Issues & Setons well adapted
to prevent attacks of the Disease, and in Scroph. Con-
stitutions will be productive of great advantage when the
Disease exists.

Particularly if it assumes the intermittent form:
The combination of Calomel & Dover's Powder, pro/ taken
every night & followed every third morning by a Purgative, will
be found particularly useful if the Patient can bear it.
When this follows the acute stage, Emetics may be given
so as to keep up nausea.
An Ointment consisting of 1 gr of Argem. Mercury & 3 grs
of Hydr. Isthatis Oil will be a very powerful & useful App-
lications of Cicuta, Hyosc. or Opium may be used with
advantage as fomentations & Salts, Issues & Setons.

264. When the Aq. Humour was lost or by pressure
and the Accumulation had been rapid, the Patient,
generally recovers their Sight. ^{Purulent}

Suppuration, often follows the ^{Purulent} Ophthalmia & the
conjunctival Ophthalmia. The Aq. Humour is mixed with
a Pus similar to purulent Matter, which obstructs vision.
When there is opacity of the Cornea from the Effusion
of Lymph, (if we observe the vessels protruding round
the Periphery we may divide them) and the
blood is not disturbed, the application of Mercury
will produce Absorption of the Lymph.

When there are specks on the Cornea in Scrophulous
we often find the Ley. High Central Pustules very useful
but sometimes there is a brown speck which degenerates
into an Ulcer & discharges an Ichorous Matter when
the application of a Solution of Nitrate of Silver will be
useful.

Mercury may be given as an Alterative, attention should be
paid to the general Health and Child should be purged with
some Purgative; establishing a Diarrhea will be advantageous.

Read Dr. Ferrius Treatise on remitting & intermittent
fevers of the Ophthalmia.

265. When Ophthalmia assumes the remitting
fever, we cannot have recourse to those remedies which
are used in Acute, in the remitting form it ought to be
treated like the chronic, Dr. C. when he was affected with
this form of Ophthalmia found relief from the Bark,
and as soon as the attack subsided in this disease he applied to
that name who ordered the strict Anti-Phlogistic Plan
without success, Dr. therefore contrary to his advice
had recourse to Opium, & found great benefit from it
in less than four hours before the evening accessions took
place afterwards continued in his practice and after finding
it gave him the attack he gave in large doses.

266. When the substance of the Brain is inflamed, the pain
is generally referred to a particular part of the brain
it is usually of the chronic form, & the Patient afterwards
dies apoplectic.

When the Patient complains of a continued headache and
it is not relieved by remedies we must suspect that there is
some Disease going on in the substance of the Brain.

267. Doubts have arisen, whether in dysipelas it is a
disease of an extension of the inflammation rather than a
local one. It sometimes occurs from repelled eruptions on
any part of the Body, when it is generally of the chronic form.

294. Occasional consequences of ophthalmia;—sudden or slow increase of the aqueous humour (*Hydrophthalmitis*; *Hydrophthalmia*;)—thickening of the coats, and turbidity of the humours (*Hypopyon*);—general or partial opacity of the cornea (*Albugo vel Leucoma*).—Nature and treatment of opacity.—Ulceration of the cornea.

295. Ophthalmia, especially of the *atonic* kind, occasionally assumes an intermitting or remitting type;—Management necessary in that case, illustrated by examples.

OF PHRENITIS,

OR INFLAMMATION OF THE BRAIN AND ITS MEMBRANES.

296. Origin of the name.—CHARACTER of the disease,—Intense pain, and sense of fulness or stricture, within the head;—redness and turgescence of the eyes and face,—impatience of light and noise,—continued watchfulness, and fierce delirium, accompanied with violent pyrexia.—Difference of symptoms alledged to mark inflammation of the membranes (*Phrenitis*;—*Meningitis?*), or of the substance of the brain (*Cephalitis*, SAUV. et SAG.—*Sphacelismus*, LIN.)

297. Phrenitis not of frequent occurrence in this country as an Idiopathic disease;—but often *symptomatic* or *secondary*,—arising during the progress of general fever, —or from metastasis of Rheumatitis, Gout, Erysipelas? &c. and then partakes more of the *atonic* form.—Importance of attending to this.

298. PREDISPOSING AND EXCITING CAUSES—Original tendency, often marked by general tension and irritability of fibre, and passionate temper. Violent fits

of anger,—continued irritation of mind occasioning want of sleep:—concussion or other mechanical injury of brain;—intoxication;—phytoseptic miasmata;—exposure to intense atmospheric heat, especially under great exertion;—certain narcotic poisons:—epidemic influence,—contagion? *Mercury.*

299. Consequences of the disease,—and an account of the various appearances observed on dissection.

300. Reasons for believing Phrenitis more intimately connected with a certain state of the Hepatic system, than at present supposed; and views of the nature and treatment of the disease founded on this,—illustrated by cases.

301. TREATMENT: — Bloodletting general and topical;—Arteriotomy?—Cold applications to the head;—Blisters near the head:—nearly erect sitting posture;—abstraction of light and noise.—Drastic cholagogue Cathartics;—Digitalis;—Antimonials:—Sinapisms—Remarks on these several means, and on the extent to which they should respectively be carried, according to the degree of the disease, and its being primary or secondary.

OF QUINSEY IN GENERAL.

302. The Cynanche, Synanche, and Angina of authors:—origin and meaning of these terms;—include several inflammatory affections about the throat, differing considerably both in their *seat* and *nature*, and consequently in their treatment. Division of them according to these circumstances, into 1. *Angina tonsillaris*,—2. *A. pharyngea*,—3. *A. trachealis*,—4. *A. parotidea*,—and 5. *A. maligna*, or *Scarlatina Anginosa*.

egg that arises from infection is named the *egg of the*
egg, and it commences with white deposit. Fever.

egg. Great difficulty has been found in separating
the membranes from the Brain. Effusion into the
Cavities & between the membranes of the Brain, & these
are sometimes studded with red points, also a milky
appearance of the Amnionoid tissue, the hind allary sub-
stance finer than usual, sometimes fine and Abscess
of matter is less evident in the substance of the Brain.

301. In the acute form, active & S. or Blood taken from the
Encephalic Artery a purulent Brain, & the purulent Arteries
also local Blood. by cupping Glans to the base of the neck
close to the roots of the Arteries, or by leeches to the temples or
along the Sutures. If Blister too increased they should be applied
to the base of the head after V. Saline Purgatives will be
most proper in this stage, but as it is generally kept up by
the state of the Bowels. Mercurial Purgatives will be proper after
Depletion to improve Arterial action after Depletion.

Since firmness to the Feet after the acute stage gone off.
Lentils should be given in ^{first to create vomiting & then} large doses (after Depletion)
to produce their purgative effects, & they are naturally mild & cold.
Those means which excite the strength of the
Constitution, as fresh exercise, fresh diet, keeping the Bowels
in Cold Bath, will be necessary after the acute stage is
passed.

There is one form of this Disease which arises from Brain
tumors. It begins in the acute form and has been treated
as such, but by far the greater number have died; but now
large doses of Opium are given until the Delirium
subsides, other Patients other than supported by a moderate
with small quantities of Wine, and with greater success
than in the former treatment. De. gives the Puls. Dose
attention should also be paid to the Bowels.



303. Sometimes *St. trinitatis* is suppurative in the Testis,
occasionally in enlargement & elongation of them & the ureters.

304. Attacks of Hemispy are more frequent in Spring and
Autumn.

307. When it is merely local it increases in slight attacks
as the ureters are frequently put a stop to it.
In the tender form in young subjects, &c. will be a sign
but in the later is a kind of pain between the Testis with
a suppurative, when the Testis is enlarged & diseased they
also become hard; Bleeding should be applied round the
scrotum. The Antiseptic Seminal, followed by a trumpet
syringe will often cut short the attack. Glycerine, in which
Antiseptic Seminal will be preserved at this temperature, but where
there are no more than containing any of the Seminal Acid
will be more appropriate. I have treated with the Symp-
tomical Dec. has proved particularly useful when there
is a slight enlargement. Bleeding on the Testis at the same time
but Symp- Seminal will be useful in clearing the blood in Testis
&c. The Symp- Seminal off back with Acid together with
an Antiseptic Seminal as a solution of Alum, with Decoct.
of Oak Bark a Infusion of Roses.

OF COMMON INFLAMMATORY QUINSEY.

303. *Cynanche tonsillaris* of Cullen;—*Tonsillitis*.—

DEFINITION. Inflammation affecting one or both tonsils, often extending to the *velum palati*, *uvula*, and parts adjacent;—marked by redness, swelling, and pain of these parts,—difficulty of swallowing, and occasionally of respiration;—sometimes without, oftener with pyrexia;—and frequently ending in suppuration.

304. PREDISPOSING CAUSES.—Original constitutional tendency;—Mercurial irritability.

305. EXCITING CAUSES.—Cold applied to the neck and fauces, or to the body in general, especially if with partial current of air, and when the person is overheated:—epidemic influence.

306. Quinsey generally of the *tonic* form at first attack; but often of a mixed character, and in some persons always *atonic*.—Erysipelatous species:—this generally connected with typhoid pyrexia.

307. TREATMENT of quinsey different, accordingly as it partakes of the *tonic* or *atonic* form,—as this primary or secondary,—and as it is merely topical, or attended with pyrexia. *Remedies*;—Venesection,—puncturing,—leeches,—blisters,—purgatives:—Emetics,—diaphoretics;—acid gargles;—Nitre:—Astringent and mildly stimulant applications. Remarks upon these, and upon the particular form or circumstances of the disease, to which they are respectively adapted.—Most effectual means of guarding against future returns of the disorder.

308. ANGINA PHARYNGÆA or *Œsophagitis*.—This of rare occurrence as a primary disease; being oftener an extension and variety of *A. tonsillaris*, than a

distinct species of quinsey.—SYMPTOMS.—Scarcely any redness or swelling apparent on inspecting the fauces;—and little or no difficulty of breathing; whilst that of swallowing is extreme;—The general treatment, therefore, nearly the same as that of *A. tonsillaris*; but the situation of the complaint necessarily precludes some remedies applicable to *A. tonsillaris*, and requires others to be employed to a greater extent.

OF THE CROUP.

309. The *Suffocatio stridula* of Home;—the *Angina polyposa* of Michaelis;—and the *Cynanche trachealis* of Cullen.—*Anglice Croup*.—Origin of these names.

310. DEFINITION. An inflammation of the mucous membrane of the trachea and its ramifications, causing great difficulty of breathing, particularly of inspiration, which is accompanied with a peculiar noise;—frequent dry cough, with harsh sound, as if passing through a brazen tube;—violent fever of the synocha kind (175).

311. The disease chiefly attacks between the period of weaning and of puberty,—usually runs its course in a few days,—and the patient generally dies suddenly as if suffocated.

312. PREDISPOSING CAUSES.—Circumstances of constitution and habit of body marking those most liable to the complaint.

313. EXCITING CAUSES:—these not well ascertained; but the most obvious is—exposure to a cold and damp evening air, especially succeeding a hot day.

314. Appearances on dissection; and an explanation of the peculiar and urgent symptoms, as well as of the sudden and commonly fatal termination, drawn from thence.

300 In this case the success, for in the location of the Disease we must see a local disease in the airway. Blisters then being applied about the throat and the general treatment of the case being carried out, followed actively.

More unable to have recourse to Emetics, Sudorifics and Purgatives from the Patient's incapability of swallowing, therefore we must rely on. &c. &c. Purgatives injected ^{into the} Rectum.

310 This Disease generally begins in the upper part of the larynx and extends thence the trachea into the Bronchi and their ramifications. In Children it is generally seated in the upper part of the larynx.

As the Complaint proceeds the difficulty of breathing is increased, a small quantity of Pus is expectorated or a portion of Membrane is brought up, the Pulse becomes quick and Hard & the Patient is generally cut off suddenly.

311. This Disease has been observed so early as Three Months, but it seldom occurs before the period of weaning. If it be not checked in the early stage it generally proves fatal.

312. Children of a ruddy complexion and sanguineous Temperament are ~~more~~ liable to it, sometimes it runs in Families and in Children who have been weakened by previous Disease, also those who have been weaned early or been brought up by the Hand. But Children of a weak habit, light hair, fair skin & a scrophulous constitution are the most liable to this Disease.

313. From Dissection, an adventitious Membrane has been found lining the upper part of the trachea, sometimes extending ^{thence} into the bronchi & the ramifications of the Bronchi but the Membrane is not always complete, sometimes portions of scapular lymph are found on it, at others a portion of it is separated so as to act as a valve & produce suffocation. A Piece of membrane shown ~~that~~ ^{figd.} was coughed up by an adult, who was the Subject of Croup, he afterwards died and on inspecting his Body more of this membrane was found lining the trachea, and lived spots were observed in the lining membrane of the Bronchi.



318. The essential character of this Disease is an active Inflammⁿ of the Membrane lining the Trachea, attended with a peculiar rattling noise in the Cough and Fever of the Inflamed Trachea.

In the first attack we must bleed according to the age of the child. If an Infant about 3i. when more advanced, as 5 or 6 years old, 3i. may be taken. Bleeding will be proper in all Cases. Emetics are extremely useful, when it has prevailed as an Epidemic it has been generally first had recourse to, when it is not very acute will frequently cut short the symptoms. Dr. C. has found the combination of Tartar Emetic & Calomel extremely useful. Sickness may be kept up for 2 or 3 hours. in the second stage they will also be useful; Blisters externally to the Throat, Calomel Purgatives in doses of 1. 2. 3. or 4 grs. Scullap will be the best expectorant. Digitalis will be proper in the second stage if there is any Inflammⁿ & action remaining Calomel will be useful given alone, some Practitioners give this only after Dr. Diaphⁿ are not only beneficial in the latter stage, the warm Bath will effectually aid the Emetic & if employed so as to produce perspiration.

Inspiring the Steam of Hot Water will frequently afford relief also the vapour of Ether when the Disease is spasmodic.

Dr. Wrother has found the Decoct Senega, $\frac{1}{2}$ ss to lss. useful in the latter stage, but Dr. C. does not think it advantageous on account of its stimulating properties, he has never tried it.

Bronchotomy is a doubtful remedy, but when the Patient must inevitably sink from Suffocation, it may be had recourse to, but it more generally happens that the Disease extends to the Bronchitis & ramifications, but two Cases have occurred where it was attended with success, therefore we should certainly try it when we have reason to think that it has not extended.

Bled from the Jugular Vein - Antimonials should be given so as to produce sickness and they will at the same time act on the Bowels. In the 2^d Stage Calomel joined with Dover's powder is useful.

320. Symptoms of Croup sometimes appear without Labours - under ulcerations of the Larynx. Sometimes however it occurs in the acute form in Adults, Dr. C. had a Man under his care who had been discharged a few days before after an attack of Fever with this form of Croup, he died three Days after his second admission.

318. The best Diaphoretic, is the combination of Calomel, Opium, - Antimony or the cammber.

315 The Cough is not attended with that noise in Larynx that it is in Croup, & there is no pain produced on the private exertions it occurs with Measles when they are epidemic & assume the malignant form.

316. It does not appear to be capable of propagation by Contact.

316. The peculiar rising noise has been attributed by some Physicians to Spasm, but Dr. C. thinks it owing to the violence of the adventitious Membrane; sometimes it occurs in Persons not affected with this Disease, it may arise from dryness of the Trachea and it may be imitated by some Persons.

Dr. C. thinks that it does sometimes prevail as an epidemic; he also believes it may occur a second time, Dr. Cheyne relates Cases of it, appearing several times in the same Child and each time with less violence.

Read. Dr. Home, *Opusculum*, & *Chambers's account of this Disease*.
317 When it assumes the spasmodic form it is as dangerous as the Influenza, it comes on in paroxysms, & the Fever is of the remitting type.

You will find that in Children who have had Croup, that when they become the Subject of Larynx that it will assume the form of Croup.

318 Children are very liable to attacks of this form of Croup, the Pulse is not so hard, Breathing is difficult, the sound of the Cough resembling the working of the piston of a syringe, and the symptoms remit.

Best Remedies first will be useful Remedies, if it continues a fortnight to be treated as other Fevers, also few have been killed by a Bleed. Acupuncture should also be had to Labour.

315. **DIAGNOSIS.**—Symptoms distinguishing Croup from the tracheal inflammation of Catarrh and Measles.

316. History of the rise and progress of the disease as collected from authors :—whether more frequent now than formerly ;—whether occasionally epidemic, or ever contagious.—Whether it attacks a second time.

317. Whether sometimes *spasmodic* rather than *inflammatory* ; and reasons for believing, that the former appearance is owing to the fever which attends, being of the *remitting* instead of the *continued* kind.

318. Essential and peculiar character of the complaint as deduced from a consideration of the several circumstances noticed above : — **MODE OF TREATMENT** founded on this, and supported by experience.—Remarks on the particular remedies ; Venesection,—leeches ; — Emetics ; —blistering ; —Cathartics ; —nauseating expectorants ; —Digitalis ? —Calomel and Opium ; — diaphoretics ; —tepid bath—inspiring the steam of hot water.—Decoct. Senekæ ? —Proposal of Bronchotomy considered.

319. Variation of treatment proper where the disease assumes the *remitting* form. (317.)

320. Account of a disease termed by some **CHRONIC CROUP**, which takes place in adults, but which appears more nearly allied to *Catarrhal Phthisis*. See **PHTHISIS**.

OF THE ANGINA PAROTIDÆA.

321. In England called the *Mumps*, in Scotland the *Branks* :—origin of these terms respectively.

322. **CHARACTER**,—A specific disease, occurring but once during life,—affecting the parotid and submaxillary

glands with considerable swelling, accompanied by pyrexia of the synocha kind (175-6), generally slight;—often showing a metastasis to the female mammæ, or male testes, and occasionally to the brain.

323. Though commonly so slight a complaint as to require but little medical attention, is sometimes violent both in its local and general symptoms.—Management of these proper with respect to its specific nature.

324. Distressing consequences occasionally from its metastasis in men, and inquiry whether this admits of prevention.

For *Angina maligna* see *Scarlatina anginosa*.

OF PNEUMONIA,

OR ACUTE INFLAMMATION OF THE LUNGS, AND THEIR INVESTING MEMBRANE.

325. GENERAL CHARACTER; pain rather suddenly attacking some part of the thorax internally, and increasing;—preceded, accompanied, or soon followed, by pyrexia, and attended by painful inspiration,—generally with cough.

326. State of the tongue, urine, &c. commonly present, and serving additionally to mark the disease.

327. Variation of symptoms, accordingly as the inflammation affects more especially—(a) the reflected pleura,—or (b) the substance of the lungs and their proper covering,—shown in—the hardness or softness of the pulse,—the kind of pain,—the state of the respiration,—the patient's aspect,—and the effect of posture;—the cough being dry, or with expectoration;—Names in use designative of this difference of situation—(a) *Pleuritis* and *Pleuro-peripneumonia*,—(b) *Pneumonia* and *Pe-*

322. These symptoms increase for four days and then subside, sometimes however it falls on the Pleura and cannot be treated as a Pneumitic Attack is after the first that is with the atomic plan.

323. In this Case in Plethoric habits, take away Blood. apply leeches, also Pomegran & Callicia, & give Draparnaud's

324. When it falls on the Lungs, sometimes it is necessary to apply leeches Punctures &c. & keep it suspended. Should be relieved by keeping still in the horizontal position.

326. In Pleuritis the Thorax will be covered with a white crust but in Pneumia with a yellow coating. in the latter the Pulse is hard & obscure, but in the former strong, full & it is accompanied with Spasmodic Fever soft & weak. The urine in Pleur. will be scanty & high colored, but in Pneumia: plentiful & deposits a sediment, in the latter the heat will be greater than natural, sometimes the skin is soft & the heat is raised, but when the breathing is relaxed the skin will become hot & dry & the Pulse soft & fuller - the Bronchus is inflamed, appetite lost & occasionally sickness.

327. a - hard Pulse and great pain on inspiration; b - Pulse full & obstructed, scarcely any pain on inspiration. In a dull & somnolent sensation, the countenance having blue appeared from the obstruction of the venal vessels. Pleur: there is no any interruption to the passage of Blood therefore the countenance will be ruddy like that produced in exercise, the Patient cannot lie on the side affected. In Pneumia cough is first dry, but soon followed by expectoration - Dr. C. has more commonly found the Lungs & Pleurae affected - than to the Pleura.

Angina Laryngea, or Laryngitis.

An infrequent Disease, occurs most commonly in those who have been subject to other Anginal Affections. Symptoms. High redness of the velum palati & uvula, followed by inflammation & swelling of the Epiglottis & Epiglottis, accompanied with considerable swelling. The Epiglottis does not cover the Glottis so completely as in health, or that when any thing is taken, some of it falls into the *Primæ Glottidis* and occasions a troublesome cough: - the tongue is thickened and swollen, uneasy sensation in the Larynx, thickness in voice, dysphagia not at first impeded, respiration difficult and laborious from the beginning, Fever erysipelatous.

Appearance on Dissection. There were two cases in St. Thomas Hospital which proved fatal. in one extensive Disease was found in the lungs similar to that produced by Pneumonia in the other extensive Disease of the Liver.

Treatment This consists in early and active Depletion. both general & local, followed by Blisters. also Blebs on the sides of the throat to give relief as the inflammation is confined to the upper part of the Larynx & *Primæ Glottidis*, we must give Medicine & operate on the Bowels, and keep up an action on the skin, therefore an Emetic may be had recourse to at the commencement & afterwards to produce its general effect.



327. Inflammⁿ of the liver often extends to the Diaphragm and produces Inflammⁿ of the Lungs on that side.

328. We generally find that when the Lungs are affected from Sympathy, that the Lymphatics or by Pneumonia, & there is nothing but very numerous Coughs up, you will also have the additional symptoms of disorder of the Bowels, sickness, bilious eructations, & Clouding of the Eye and Pain produced by pressure on the right Hypochondrium.

329. When in the Med. History said that the pain is felt under the Sternum, and extending to the Bronchii, and that there is not so much pain felt on inspiration. When the Diaphragm is said that you will have Delirium but Dr. Boerhaave met with it (altho' he has considered many who have died from it) as a symptom tending to show the Disease.

330. The active form of the Disease is more likely to occur between the age of puberty & the middle period of life, while Puip. rather generally attacks old people. It is more common in Autumn & Spring and in temperate climates, also in the male than the female.

331. When Pleurisy prevails as an Epidemic they are often combined with Pneumonic Symptoms.

Pneum. Sympthoid, begins with coldness, great prostration of strength, sunken countenance, excessive pain, & trouble of sleep, pulse seems full, but easily compressed, a mucous cough, Pulse seems full, but easily compressed, & generally terminates in four days. It has been the custom to give Camphor. Camomile & Stimulents in this form. Dr. Parr says he has not found the Bark virus as the difficulty of breathing, & the laxatives & Glysters shd be omitted at the same time.

ripneumonia.—These however, in general combined with each other, in various degrees; and frequently with inflammation of the liver, — which, unless taken into account, gives rise not only to considerable embarrassment in the diagnosis, and indications of cure,—but to imperfect success or complete failure in the result.

328. Curious fact respecting the sympathy of contiguity in pneumonic inflammation; and application of it to explain the utility of certain remedies.

329. Particular symptoms alledged to arise from the inflammation when seated in the mediastinum (*Mediastina*, VOGEL,)—or the diaphragm (*Paraphrenitis auctorum*.)—Doubts respecting some of these, founded on dissections.—Occasional change in the seat of the pain, and probably also in the inflammation.

330. PREDISPOSING CAUSES; a constitutional tendency to the complaint, especially marked by plethora, with a tense and irritable system of blood vessels, particularly of the lungs.—Certain period of life.—Male sex?—Former attacks of the same disease.—Season of the year.

331. EXCITING CAUSES; sudden or long continued refrigeration, especially if aided by moisture, and operating on the body when overheated or fatigued;—the imprudent use of spirituous liquors immediately after this (*Pleuritis vel Pneumonia vera*);—particular quality of atmosphere sometimes epidemic; (*Febres pleuriticae*)—peculiar quality of certain febrile contagions (*Pn. catarrhalis*,—*morbillosa*,—*typhoidea*, &c.)—metastasis of acute Rheumatism, —of Gout, —Erysipelas? &c. (*P. rheumatica*, *arthritica*, *erysipelatos*? &c.)—inflammatory, sub-inflammatory, or bilious, remitting, and intermitting fevers (*Synocha pleuritica*;—*Pleuritis biliosa*,—*Pl. remittens*);—irritation

from worms in the stomach (*Pleuritis vel Pleurodyne verminosa*).

332. DIAGNOSIS.—Marks whereby to distinguish Pneumonia from spasmodic and other painful affections of the chest.—Discrimination of the disease into *simple* or *complicated*,—and into *idiopathic and primāry*, or—*symptomatic and secondary*,—as drawn from the predisposing and exciting causes,—the mode of attack and progress of the disease,—the symptoms present.

333. Importance of determining in what *degree* the disease partakes of the *tonic* or *atonic* form, as greatly influencing the treatment (*Pneumonia vera et notha*):—circumstances necessary to do this, drawn from the patient's age,—sex,—previous health, and habit of body,—strength,—assignable causes, (330-1), &c.

334. Different modes in which pneumonic inflammation terminates in health, death, or another disease:—Resolution,—Expectoration,—Adhesion;—Extravasation of blood into the interstitial substance of the lungs,—or profuse effusion of glairy fluid into the air cells and bronchia;—Vomica;—Empyema;—Tubercles;—thickening and ossification of the inflamed membranes and vessels;—Hydrothorax.—Signs of these respectively, as collected from observation and dissection, and illustrated by morbid preparations.

335. TREATMENT OF PNEUMONIC INFLAMMATION IN GENERAL, admits of considerable variety, according to its being—*simple* or *complicated*,—*original*, or *secondary*,—to the particular seat of the inflammation,—and, still more, its *degree* and *kind*.—The chief indications are—

1. *In the beginning of the disease*, to check the inflammation in its acute state, and while still ad-

332. If the Patient survives 7 Days it will in general terminate favorably, if the Symptoms do not increase.

333. Pneumonia: most generally attacks Patients of an advanced age, & those who have been subject to Pneumonia in Infancy also those who have lived in temperate climates generally prevails in the spring when there is a cold & easterly wind.

334. When the symptoms are yielded in the Pectoration it is often streaked with Blood. — At first the expectoration is mucous, after ^{wards} greenish, and it draws towards a conclusion, thick and white. We often find that the lungs are completely adhered to the P. C. & the Patient will have difficulty the rest of his life. However, Patients may recover when an Abscess is found. Suppuration. The Patient complains of chilliness, and is always able to lay more comfortably on the side affected the cough is dry, which is lessened by turning on the other side. Hydrothorax will be known by the difficulty of breathing, and the inability of lying in the supine posture, the Pulse is soft, quick & irregular, it is also generally accompanied with Anasarca of the Face & extremities, the Patient has great difficulty in changing his posture, and frequently awakes in a sleep frightened under the idea that he is suffocating.

334 - We generally find that there is more than one abscess. The Pus is generally carried off by it. it will be known by the Rigors which come on & the Pulse being often, and when the Abscess bursts a large quantity of matter is brought up. Then it ceases, until it is formed, when it is again brought up.

Empyema. We sometimes find however that there is a considerable quantity of matter in the lungs cavity of the Chest, without there being an Abscess in the lungs. When there is a protrusion in the side the Pus should be let out by puncture, sometimes it bursts in the air cells and is brought up by cough.

335. 1. When Inflammⁿ attacks the Membrane and not the Lungs, we often find that copious Bleeding will cut short the complaint, but in both cases it is absolutely necessary.

It sometimes happens from the congestion of Blood that you cannot at first get Blood from the arm, but by abstracting some locally, the Pulse will rise and you will then have the Blood flow on opening a vein in the arm.

Blistering ought not to be applied until L. B. has been reduced to, or then until we think the Symp^{ts} have relieved as well as requiring its repetition.

It has been observed that when the Kidneys can be acted on that the Inflammⁿ will be more relieved than by a similar action on any other organ.

2. In a haler and the Mild Draught with Squills the more applicable to Pu^{er} G^{er} as it occurs in its most common form. When there is any difficulty in bringing up the Saliva, inhaling the Steam of W. Water will assist it. In Eiderly Persons, Squills with Anemone^a or Camphor^a must be used, or with either Anemone^a will be proper. When the Inflammⁿ in the Chest has subsided the Warm Doses will be advantageous as Infusⁿ of cam^a. It has given it with Squills & Anemone^a.

337 Dr. C. has not found Syncope so often attend this Disease at ~~the~~ the commencement as Authors have mentioned.

The Patient is at first to lie on either side on his back, the Tongue is always dry, and he can draw in a free breath without complaining of any particular pain, but by pressing on the left side pain will be produced, & there is generally some irregularity of the Pulse.

338 When it occurs Prostration it is commonly produced by exposure to Cold aided by moist heat.

In the greater number of instances where pain leaves the extremities it will be necessary to the Feet.

Read Dr Fort Davies

mitting of a perfect resolution,—By Venesection,—cupping,—leeches,—blisters ; — cathartics ; — moderately cool air ; — Nitre ; — Digitalis ; — Infus. Rosæ. 2

2. *In the more advanced stage*, to favour the expectoration or other evacuation that may take place, and that is found to give relief,—By Mild diaphoretics, tepid diluents ; — Opiates alone, or combined with Calomel and Antimonials ; — Inhaler ; — gentle Emetics, Squills,—Seneka,—Ammoniacum,—Ammonia.—Bitter Tonics, and moderate stimulants :—And

3. To support the strength under these,—to allay urgent symptoms,—and to guard against those bad consequences, to which there appears any evident tendency.—By light nutritive food,—moderate tonics,—diuretics,—seton, &c.

336. Remarks upon the propriety and extent of these remedies individually, as determined by a consideration of the various circumstances already noticed.

OF CARDITIS, AND PERICARDITIS ; OR ACUTE INFLAMMATION OF THE HEART AND ITS MEMBRANES.

337. CHARACTER :—Along with several of the symptoms belonging to Pneumonia, there is great faintness, anxiety, and oppressive pain referred to the region of the heart, accompanied with extremely frequent, small, and often irregular pulse, together with violent palpitation, and even syncope, on motion.

338. Acute Carditis of more frequent occurrence than was generally believed ; but perhaps oftener a metastatic or misplaced form of Rheumatitis, than a primary disease allied to Pleuritis and Pneumonia.—Instances of the disease illustrated by preparations.

339. Consequences of Carditis ; — inflammatory exudation, with effusion of serous fluid into the pericardium,—or adhesion of the pericardium to the heart ;—ossifications of the heart and its appendages.

340. THE TREATMENT OF CARDITIS should consist of the same means used in the more acute forms of pneumonic inflammation ; and these employed with a promptitude, and to an extent, proportioned to the more rapid progress and greater danger of this disease.

OF HEPATITIS, OR INFLAMMATION OF THE LIVER.

341. GENERAL CHARACTER.—Violent and tensive, or dull and heavy pain in the right hypochondre, increased on pressure, inspiration, or particular posture ; sympathetic pain referred to some remote point of the thorax ;—dyspnœa, with sense of stricture or oppression about the præcordia ;—sometimes cough, generally dry, and often by paroxysms ;—occasionally vomiting, hiccup, and sallow or icteritious countenance :—primary or symptomatic pyrexia.

342. Division into two species—the acute (*H. membranacea*)—and the chronic (*H. parenchymatica, vel Hepatalgia apostematosa*), or into the tonic and atonic forms ;—these widely different in their respective extremes ; but, as being variously blended, best treated of under one general head.—Circumstances under which more especially one or other form takes place :—symptoms distinguishing them, and others serving to denote the particular seat of the inflammation.

343. Progress of the disease according to its degree and kind :—Terminations,—in resolution,—in adhesion,—in suppuration, and abscess opening — externally,

339 When the Heart adheres to its Membrane it is generally accompanied ^{with} or produces Enlargement.

340. In the commencement we must bleed rather largely, & repeat, when the Patient has been ill some time if a large quantity be taken it will produce Syncope, therefore only a few ounces should be drawn at one time, a perpetual Blister over the Heart will be proper, & Dig. Nalis combined with Culomel to be given when it is accompanied with Effusion; when the pain continues after the active Issues it is often necessary to give an Opiate. Keeping the Patient perfectly at rest for considerable time will often tend to lessen the bad consequences.

Read Dr. Ford's Treatise, also a Paper on the preceding
Observations by Dr. Francis Smith D. D. and Dr. B. B. on the

341 When the Pleurisy comes on the liver is inflamed the pain will be increased by inspiration, ^{especially} the Patient will not be able to lay on the side affected, when any other part is inflamed he will lay with more ease on the affected side; The Pain will be referred to the Top of the Shoulder and not always expect that, when the Pleurisy attacks the concave surface of the Liver it is accompanied with vomiting.

342 When Hepatitis occurs in Hot climates it is generally of the acute form & the Patient is carried off by the formation of a large Abscess. More frequently however we have the chronic form of the Disease.

we do not find the active oxygen come on until the inflammation attacks the membranes. When the substance of the liver is inflamed it is accompanied with dull heavy pain.

In the chronic form the symptoms resemble more those of Dyspepsia, whilst in the acute, the influence is generally so active that the disease terminates in death in 3 or 4 days if not checked, in hot climates.

In the former there is dull heavy pain in the epigastrium
of the liver & the bowels will be ~~constipated~~ deranged.

339. When it quickly terminates fatally, it is generally in Effusion into the Pericardium, sometimes in the disposition of adhesive matter on the surface of the Pericardium.

The case of a young gentleman related, who recovered after two years, by being kept on a double inclined plane & confined to a milk diet, at the same time taking him into the open air.

340. If. b. does not relieve at the commencement, we must not repeat it too copiously afterwards, altho you still find the Patient complaining of considerable pain in the Heart. If he should feel afterwards much pain in the region of the Heart the application of Cupping Glazes will be preferable to b.

341. The symptoms will resemble those of Inflammⁿ of the lower lobe of the right lung when Pleurae inflamed. There will also be cough. At it will be dry & become more harassing - Pain in the left Hypochondrium & left shoulder generally occurs in the chronic form.

343. The Perforation in abscess is not so frequent in the acute form as in the chronic, some cases however have occurred. When the Inflammⁿ attacks the membrane the liver contracts adhesions to the Diaphragm & sometimes when an Abscess makes its way thro the Diaph. into the L^r the Patient in general dies, but instances have occurred of their surviving. sometimes it makes its way into the Colon which will be known by the matter being found in the stool when it points externally if the Matter be tolerably good, it may be opened. - I further mentions a case where the Matter was absorbed and carried off by the urine, and the Patient complained of great pain in his loins.

246. In acute Hepatitis we often have great sickness,
not in Pleuritis; In fact there is a burning
heat in the stomach, not so in the Pleuritis with
some approaching that of Peritonitis.

In warm climates more often connected with Dysentery.
In Hepatitis the patient will complain of catching gas
in drawing in his breath, but in Pneumonia there is
a sensation of smothering the feels as if he could not expand
his lungs.

326. Injuries to the Brain sometimes produce it,
particularly in warm climates.

327. If the inflammation is not got under in the first few
days, we often find that suppuration will follow.

—into the ducts,—into the lungs,—into the abdominal cavity :—induration or scirrhus.—Gangrene ?—Signs of these terminations respectively,—and their most frequent consequences.

344. **DIAGNOSIS.** Acute hepatitis often simple, but occasionally joined with pneumonia or gastritis ; and sometimes entirely mistaken and unsuccessfully treated for these.—Marks whereby they may be generally distinguished.—Frequently accompanies bilious remittents, and sometimes intermitting and contagious fevers in hot climates.—The chronic form often connected with Dysentery.—Importance of attending to these combinations, as considerably influencing the treatment.

345. **PREDISPOSING CAUSES ;**—Male sex ;—adult period ;—certain constitutional tendency, marked by excess or irregularity in the hepatic secretion, and often connected with plethoric habit, tense irritable fibre, and passionate temper :—stopping customary discharges, especially the hæmorrhoidal.

346. **EXCITING CAUSES ;**—occasionally all those that induce general inflammatory pyrexia, as—sudden vicissitude of temperature,—cold drink,—violent bodily labour or exercise ;—but more especially excess in spirituous liquors, and continued great heat of climate or season.—Mode in which these last operate ;—and enquiry why Hepatitis particularly frequent on the Coromandel Coast.

347. **PROGNOSIS.**—This generally favourable in the *acute* form, if the disease be early seen and properly treated. But in the *chronic* form, its progress in disorganizing the Liver is so insidious, and so often connected with Scrophula, Cachexy, or habits of intemperance, as to render the Prognosis very difficult, and often unfavourable.

348. The TREATMENT OF HEPATITIS necessarily very different, accordingly as the disease is *acute*, or *chronic*,—*simple*, or *complicated*.—In the *acute form*, bloodletting general and topical,—blisters—cathartics,—and other antiphlogistic means—must be had recourse to in proportion to the violence of the inflammatory symptoms, the previous health and vigour of the patient, and the nature of the exciting causes.—Why venesection less, and local bloodletting, with purging, more useful here, than in pneumonic inflammation.—Why Calomel more efficacious than any other cathartic ;—with directions for its management.—In the advanced stage of the *acute*, and almost universally in the *chronic* Hepatitis, Mercury carried to gentle ptyalism, the most effectual remedy :—enquiry into its *modus operandi* ; and curious observation respecting it in latent hepatic abscess.—Other remedies occasionally useful, especially in the *atonic* form ;—mild diaphoretics,—tepid bath,—fomentations,—diuretics,—bitters,—alkalies, — *Cicuta* : —issues,—setons ;—sea voyage :—Nitric Acid ?—*Extr. Taraxici* ? &c. Remarks on these.

349. Examination of the opinion—that ACUTE HEPATITIS is a rare disease in Europe ; with arguments to shew, that it is often mistaken for, and treated as, Pleuritis and Pneumonitis.—Proofs drawn from the complicated and peculiar structure of the Liver, and illustrated by morbid preparations, demonstrating, that it is subject to a greater variety of diseases than perhaps any other organ of the human body. Enumeration of several of these, with remarks upon their symptoms and treatment :—1st, Inflammation of the investing membrane, followed by adhesion to neighbouring parts.—2d,

348 We should bleed largely at first and it, repetition must be regulated by the relief affording while the blood is flowing from the vein, together with the circumstances noted in the Syllabus, when it occurs in combination with other Diseases, it may then be a question how far it will be proper, in warm climates even here we must have recourse to general and afterwards, local Bleeding.

After ^{the} we must employ local bleeding together with ^{the} ~~Stimulant~~ ^{Stimulant} ~~Local~~ ^{Local} ~~Antiseptic~~ ^{Antiseptic} ~~Blister~~ ^{Blister} ~~or~~ ^{or} ~~any~~ ^{any} ~~of~~ ^{of} ~~the~~ ^{the} ~~above~~ ^{above} ~~mentioned~~ ^{mentioned} ~~preparations~~ ^{preparations} ~~in~~ ⁱⁿ ~~treating~~ ^{treating} ~~the~~ ^{the} ~~inflammation~~ ^{inflammation}. By purging with the saline Preparations we produce a large discharge from the Bowels and unload the Portal system by lessening the quantity of Blood to be circulated in the Liver.

In hot climates Calomel in doses of gr. x to xx may be given every four hours, and it does not act at all powerfully on the Bowels.

It appears that small doses of Mercury by exciting the action of the Pulmonary system relieves the congestion under which this organ labours.

In the chronic stage where there is irritability of the Stomach it is often necessary to add a little Opium, and when you want to act on the skin it may be combined with Antimony, or the warm Bath will be a good adjunct. When you want to introduce Mercury slowly into the constitution and to keep up the force of the Stomach, Potass. will be useful, as Colomel. Selt. Zingib. or Eucassia. Alkalies will tend to supply the deficiency of Bile. Opuscula will aid in the back of the organ. The Lactic Acid either alone, or joined with the Emulsive forms one of the best remedies in the chronic stage in relieving Dropsy. They have also been used as a Bath, but it sometimes produces a prurigin when you are obliged to decubitate and also an eruption on the skin.

D. has given Calomel in its doses but he did not find it more successful than smaller ones, neither was it productive of any bad symptoms; - It has been observed that even an abscess is forming it is difficult to produce Ophthalmia, but sometimes have occurred where it was brought on more speedily, therefore we ought not to be too free in its exhibition when there is any tendency to dropy & emulsa. Pot. Selt. & Colomel. should be given - Opuscula will be proper when there is any tendency to disease in the lungs - The Lactic - Emulsive Acid may be tried where the Patient cannot bear the exhibition of Mercury.



349. By far the most frequent functional Disorder
of the Liver ^{are} diminished, or interrupted secretion of Bile.

350 Considerable tumour ext. in the Thorax,
by taking in a deep inspiration.

352 The symptom is that which usually occurs in combination with other Diseases, there is generally a peculiar appearance in the Fauces. We seldom find that fixed pain, small & hard Pulse, great prostration of strength which occurs in the Pleurisy but there is generally a shifting pain all over the Abdomen, the skin is less hot & the bowels are seldom constipated.

Inflammation of the substance of the Liver, often ending in partial obstruction, and occasionally in abscess.—3d, Mucous obstruction of the ducts.—4th, Granulated Liver, soft and hard.—5th, Tuberculated.—6th, Flaccid and macerated.—7th, Ecchymosed.—8th, Aneurismal.—9th, Calculous concretions.—10th, Hydatids.—11th, Hæmatoid Fungus, or Medullary Sarcoma.—12th, Functional disorder independently of diseased structure, e. gr.—(a.) Erethism, and *Polycholia* or redundancy of Bile;—(b.) Torpor, and *Acholia* or deficiency of Bile;—(c.) Secretion of morbid Bile, either from particular disordered *action* of the Liver, or from certain conditions of the blood and general system;—*Cacocholia*.

OF GASTRITIS,

OR INFLAMMATION OF THE STOMACH.

350. CHARACTER;—Acute and continued pain in the region of the stomach, increased by external pressure, or by swallowing any thing that irritates by its bulk, quality, or temperature;—frequent retching, and occasionally hiccup;—pyrexia, with extremely quick small, and hard pulse;—great anxiety and prostration of strength.

351. Idiopathic Gastritis rare; but many of its symptoms occasionally attends inflammation of the liver, intestines, or kidney;—and also various fevers, especially Bilious Remittents, Yellow Fever, &c.—Examples illustrative of this in the case of the Liver, &c.

352. Division of gastritis into two species, viz.—(a) the *phlegmonous*, and—(b) *erythematic*:—foundation of this division, and marks of each species.

353. PREDISPOSING CAUSES not clearly ascertained.

354. EXCITING CAUSES; — drinking very cold liquors when the body is greatly heated; — large doses of Nitre; — overdistension with highly stimulant or indigestible food; — particular determination under general fever: — Metastasis of gouty, rheumatic, erysipelatous, or pemphigose? inflammation; — checking certain chronic eruptions; — swallowing articles which act mechanically, chemically, or specifically, by wounding, corroding, or otherwise inflaming the coats of the stomach. — Remarks on the mode in which these causes respectively operate.

355. Progress, and terminations of the disease; — with the appearances on dissection: consequences which occasionally result from it, when caused by certain poisons.

356. THE TREATMENT of gastritis will necessarily vary according to the exciting cause, and the degree of the disease, and to its being *simple* or *complicated*. — The chief indications are — 1. To lessen the inflammation by — venesection, — cupping, — leeches, — fomentations, and blisters, — opiates by glyster, or externally; — 2. To recal any external inflammation or cutaneous complaint, the disappearance of which had preceded the affection of the stomach. — 3. Where offending matters swallowed are still present, — to evacuate, correct, dilute, or inviscate them; — and afterwards guard against their future consequences.

357. Means directed to fulfil the *second* indication. — Individual remedies especially calculated to answer the *third*, according to the nature of the hurtful cause, e. gr. whether *mechanical*, as powdered glass, &c. — *chemical*, as corrosive Acids or Alkalies, — Arsenic, — Copper, — Oxymurias Hydr. &c. — or *specific*, as certain acrid or narcotic vegetable matters.

354. When a Person has fasted a long time, he should not take any stimulating article but something that is mild - as a little milk &c.

Altho this Disease is seldom produced by external causes, as exposure to Cold, still we have Dr Paris's authority for stating that it is sometimes produced by them

335 When it terminates in the formation of an Abscess, the pain will be less violent, sometimes disappearing altogether, sometimes blood comes up with the food, and the Pulse is softer & more full.

When Arsenic is taken you are invariably seized thro. the Abdomen and produced more at the Epigastrium than at any other part of the Abdomen & Cervix.

356 In the active form of this we must bleed largely, following it by cupping &c. - Leucids that have been brought to a low temperature by placing them in ice or snow, & granules of Ice, may be swallowed, with advantage, particularly in the dysenteric & inflammatory stages, in the form of glyster with tied powerfully to loosen the irritability of the stomach after the active stage has been subdued. Opium may be applied externally - 2. by the Hot. Bath. vomitatives, Blister &c. &c. &c. &c. Lactice, &c. when food has relided from the stomach. Also by topical bleeding, particularly in young & plethoric habits. Also by topical bleeding, particularly in young & plethoric habits. Also by topical bleeding, particularly in young & plethoric habits.

257. When any small substances are swallowed, as pills
poisoned pills, we should give Beluents & Rancidages and
order to heat the parts: when a coin is taken we should
not use heated things: Practice and encourage vomiting

you are treated properly.
 I advise betakers give an Emetic and encourage vomiting
 afterwards a purge to evacuate the Bowels and then treat
 the Inflammation of Stomach. When Effluvia is taken away will
 compose it, recourse should be also had to a solution of
 Magnesia and Warm Baths; If System of Nerves be very
 affected Opium should reduce it. In mild Cases, and in the
 more so by some treated with it. When any have it is better
 to excite them to vomit immediately, by either by Sulphur
 or other means. When treated as a nervous Affection of the
 Stomach by Warm Baths, mild Opium, Glysters and
 laxatives by the Mouth.

257. If Alkali Acid be taken, a large quantity of mucila-
ginous fluid sh^d be taken to dilute it as much as poss^{ble}.
If Alkalies are ~~are~~ taken a weak Acid sh^d drank in
order to make it neutral, but if it be in the canstic state
it will immediately act on the Stomach & destroy it.

360. When this organ suffers from Congestion in Agues, abstracting Blood locally will be proper, & by giving the Medicines adapted to cure Agues, it will generally be reduced to its natural size and regain its healthy state. When an Abscess takes place and it adheres to the Pancreas of the Glandula, it should be opened when it points.

In chronic Diseases of the Spleen, alterative doses of Mercury should be given; the Bowels kept regularly open, and the warm Bath used as soon as it can be used. Scattered we are in general able to remove them.

359 Sometimes you have Chronic enlargement from an injury. An Abscess of the Spleen commonly attended the Ductum Bile, in most cases that terminated fatally it was more or less diseased. When the Spleen becomes very much enlarged the common termination ^{two} of it is in Dissep.

360 When the Disease becomes profuse you should give small doses of Mercury which will prevent the Spleen becoming enlarged.

361 The Kidney is sometimes enlarged from Neutoma also from the Ductary Sacroma, an Abscess sometimes forms, when nearly the whole of the Kidney is absorbed, occasionally it contains Hydatids. Histories have occurred where there were large Abscesses of the Kidney, nearly the whole of its internal surface being absorbed, and still the secretion of Urine remaining as copious as in a healthy state. I have mentioned that he met with a Kidney that weighed 40 lbs.

OF SPLENITIS.

358. Idiopathic acute inflammation of the Spleen an extremely rare complaint:—probable cause of this.—Symptoms characterizing it where it does take place;—Pyrexia; pain in the seat of the spleen, increased by pressure, and accompanied with tension, and heat of the part; without any signs of Nephritis.

359. Simple Congestion,—or Chronic inflammation and enlargement of the spleen, occasionally with abscess, a common attendant upon, or consequence of, Intermitting and Remitting Fevers in certain countries.

360. The treatment of Splenitis, whether acute or chronic, nearly that directed in the corresponding states of hepatic inflammation.—Curious operation said to be practised by the native physicians of India in cases of enlarged Spleen.

OF NEPHRITIS, AND CYSTITIS,
OR INFLAMMATION OF THE KIDNEYS, AND OF
THE BLADDER.

361. Acute Nephritis and Cystitis of rare occurrence as spontaneous diseases; being usually the consequence either of irritation from certain foreign matters passing through the kidneys and bladder, or of calculous matter formed in them.—Chronic inflammation and ulceration, however, or thickening and mucous or puriform discharge of these organs, occasionally idiopathic; but still oftener symptomatic of gout, gravel, or stone.

362. SYMPTOMS OF NEPHRITIS;—Pain in the region of the kidney, often extending along the Ureter, and causing numbness of the thigh, with retraction and pain of the testicle on the same side:—frequent calls to pass off urine, which is sometimes rather pale at first,

but oftener very red and scanty; and occasionally altogether suppressed (*Ischuria renalis.*);—retching;—preceding or accompanying pyrexia.

363. PREDISPOSING CAUSE,—Constitutional irritability of the kidneys, generally connected with gouty or calculous habit.

364. EXCITING CAUSES;—Mechanical injury from blows,—falls,—strains,—long continued and violent exercise in travelling;—cold, especially with moisture, applied to the loins and belly;—certain stimulating matters swallowed, and acting specifically upon the urinary passages, as Cantharides, Turpentine, &c.—metastasis of gouty inflammation;—the lithopoietic process,—or the calculous matter when formed, acting by its bulk or figure.

365. DIAGNOSIS;—Symptoms distinguishing Nephritis from rheumatism,—from colic,—from enteritis,—and hepatitis.

366. TREATMENT;—Venesection,—cupping;—leeches;—mild cathartics;—glysters;—warm bath,—fomentations;—antimonial diaphoretics;—Opiates;—mucilaginous diluents;—super carbonated Soda Water? —If from Gouty metastasis, then means directed to re-excite the original inflammation. SEE GOUT.—If from Calculus, the means specified under that head.

367. SYMPTOMS OF CYSTITIS.—Pyrexia followed or accompanied by pain and tension in the region of the bladder, increased by external pressure;—frequent and painful discharge of urine, or suppression of it;—tenesmus.

368. Predisposing and Exciting Causes,—in general those enumerated (363-4);—likewise injury during labour;—extension of gonorrhœal inflammation.

369. Irritation and gleeing of bladder (*Cystirrhœa mucosa, vel Catarrhus Vesicæ*), sometimes occurs in delicate women, especially after lying in;—and chronic

362 Considerable Irritability of the Stomach, the Patient complaining of Nausea & retching, sometimes it is accompanied with pain similar to Colic, but it is generally fixed to the part which is near the Kidney, acute pain will be produced by pressure and it will be increased by leaning forward.

365 From the Inflammⁿ occurring in the cellular Membrane near the Psoa Muscles by there being no attraction of the Intestine or pain in the course of the Ureter.^r From Colic by the pain not being referred to the region of the Kidney, and there being no affection of the Urine, or Pus in the Urine. It happens that in Enteritis you have that sickness in the commencement which occurs in Nephritis; the pain is also referred to the fore part of the Abdⁿ men and increased on pressure. In Hepatitis we have pain under the cartilages of the Ribs, but none of the Colic or Uretic, and no restrictions appearance of the countenance, no retching, but considerable pain produced by rotating the thigh.

367. Also burning heat in the region of the Bladder. The symptoms will vary according to the part of the Bladder inflamed - If it be Punctus, he feels a constant desire to pass his Urine, and never relieved. If the neck there is great pain in passing the Urine, and sometimes retention.

365. It will be distinguished from Rheumatism, by the pain in the latter shifting, & being increased by the Patient raising himself in bed - by want of nausea vomiting, there not being any change in the appearance of the urine, although in quality & quantity, as in their very situation of the Acute.

366. It is doubted how far An. Draft will be proper at first in consequence of the sickness, but that which is produced by them will be different from the other & cause considerable relaxation, therefore Dr. C. thinks they may be given with Opium advantageously, when the irritability of the Stomach has been relieved.

Opium, after 12, and joined with Nutmeg - Peppermint in Succ. Cinnamon will be extremely useful. The superlative: Adonis Vernalis will be efficacious in abating the irritability of the Stomach.

368. In Catarrhs, this symptoms so nearly resembles that of Nephritis, that there will be considerable difficulty in distinguishing them, Dr. C. met with two Cases where he was deceived, but in general the pain in the latter is constant above that of the former, having distinct semiforms.

374. When the Intestines & Peritoneal Tissue are
inflamed the patient often dies in 10 Days,
The Pulse will be from 120 to 140, the Tongue white,
anxious countenance, if small Intestines, coming
not so if large, at the beginning. The pain will be
increased when it extends to the muscular coat,
and the Patient will be anxious in the bent position,
Sometimes it will go on for a few days before the
diagnostic symptoms show themselves, and thus
the Patient using improper means delay
the Pain, as drinking Spirit, often false sacrifice to it,
As the Disease proceeds the Tongue becomes brown,
the heat is excessive, the Bowels tense, sometimes
accompanied with flatulence at this time, the Bowels
being open, followed by an increase of pain the
Symptoms the Patient will linger on for 8 or 9 Days.

36. Catarrh vesicae sometimes occurs in young persons from exposure to cold and cold exposure in life in two cases, in young thephand, which fell under Dr. Cullen's notice he found that it gave way by keeping the Bowells open and exhibiting the Uva Ursi.

When it is symptomatic of enlarged prostate, pain is felt in the perineum, ~~that~~ ^{and} it is produced before the urine flows, which comes mixed in drops, sometimes there is suppression. If of Stricture it is the symptoms resemble those of stone in the bladder but by the bearing down, pain in the back extending to the perineum of the abdomen and then ascending, labour pain as by the mounting down the thigh, you will in general be able to distinguish it. Besides the antiphlogistic treatment we may use injections with advantage. It is doubted by some whether blisters should be used from the sterility they sometimes produce, after bleeding when the Sympt. of stone did not pass Dr. C. has found them advantageous.

In Stricture, Uva Ursi together with mild alterative medicines, mild antispasmodics, Stimulants, as Spt. Sassafras, Bals. Capivi or the lighter, beginning with 30 Drops, increasing to 60. The Bath with sometimes will cure when other Remedies fail. Uva Ursi with mucous alkalis.

373 Enter. Phleg. Pain very severe, Synocha, Pulse quick, small & wiry, vomiting & costiveness.
Ent. Erythema. Pain subsiding, Fever less violent, Pulse full & hard no vomiting at the beginning, & mixed stools of Bowells.

inflammation, with thickening of the coats, and puriform or purulent discharge by urine (*Cystalgia purulenta*) not uncommon in elderly persons, especially men.—Symptoms distinguishing *idiopathic* Cystitis from the symptomatic affection attending enlarged prostate,—scirrhous of the uterus or rectum,—or stone in the bladder.

370. TREATMENT OF CYSTITIS nearly the same as directed in Nephritis.—Some remarks on Cystirrhœa, —thickening, and ulceration of the bladder, and other complaints mentioned in par. 369.

371. Acute Inflammation of the Uterus (*Hysteritis, vel Metritis*),—of the Mesentery (*Mesenteritis*)—and of the Peritonæum (*Peritonitis*), — almost peculiar to lying-in women :—as constituting a part of Puerperal Fever, therefore, and being intimately connected with the circumstances of pregnancy and parturition,—referred to the course of lectures expressly upon that subject.

OF ENTERITIS,

OR ACUTE INFLAMMATION OF THE INTESTINES.

372. CHARACTER,—Severe, fixed, and depressing pain, with sense of heat, in the abdomen, more especially round the umbilicus,—increased on pressure,—preceded or accompanied by pyrexia, and generally by obstinate costiveness,—and followed by vomiting, and tympanitic distension.

373. Division of enteritis as it affects the substance of the intestines (*Enteritis phlegmonodea*), or their internal villous coat (*E. erythematica*):—symptoms distinguishing these.

374. State of pulse,—heat,—tongue,—urine, &c. in the progressive stages of the disease, according to its particular species (373).

375. **DIAGNOSIS.**—How to be distinguished from Colic,—and from inflammation of the other abdominal viscera.

376. Modes in which it terminates—resolution,—puriform effusion,—gangrene :—proportional frequency of these terminations according to the nature and degree of the exciting cause, and the form the disease assumes (373) :—Symptoms accompanying those terminations respectively.

377. **PREDISPOSING CAUSES ;**—Certain period of life ;—full living ;—plethora ;—habits of indolence ;—inactive state of liver ;—constitutional irritability of the intestines.

378. **EXCITING CAUSES ;**—A. Cold suddenly or long applied :—B. Substances irritating the intestines—(a.) by their bulk, shape, or indigestibility, e. gr. hard kernels, seeds, or stones of fruit,—pieces of metal,—calculous concretions,—scybala ;—or—(b.) by their chemical or specific acrimony, as concentrated acids or alkalies,—various metallic preparations,—drastic purgatives,—high seasoned food in large quantity :—C. Worms :—D. Spasm producing stricture or intro-susception :—E. strangulation of the intestine from hernia :—F. retrocession of gout, rheumatism, erysipelas, or chronic eruptions :—G. suppression of customary evacuations, as from piles, old ulcers, issues, &c.——Remarks on these several causes, and on the form of intestinal inflammation to which more especially each gives rise.

379. **TREATMENT.**—The indications are—1st, To lessen or check the inflammatory state by Venesection—by Leeches and Blisters to the abdomen,—by Digitalis? —2dly, to allay pain, vomiting and spasm, and to produce a determination to the surface of the body, as well as

375. Pus gives pain in Enteritis, but relief in Colic, and in the latter the Muscles of the Abdomen are seldom drawn in, & the Belly seldom inflated, the pain too is generally confined to the Navel. The Pulse will enable us to distinguish it from Septicæmia, in which the Pulse is full and hard, whereas it is small & weak in Enteritis.

376. When Gangrene takes place, there is a cessation of pain, the Pulse becomes soft, quick & irregular, and the Patient falls into a transitory state; sometimes however Convulsions take place before Death.

378. In Rheumatism the Inflammation more frequently attacks the mucous membrane of the Intestines, than the Peritoneal covering.

379. When it originates from exposure to cold, &c. and the strict antiphlogistic plan is to be necessary, some time after B. &c. the Patient feels relieved from the Pain &c. but it will return again in a few hours or a few days; therefore we must not relax our endeavors to subdue the Inflammation. We must be guided in Bleeding by the relief the Patient experiences, the degree of Pain & the state of the Pulse; the local Abstraction of Blood will be greatly assisted; Blesters ought not to be used at the commencement. But after free Bleeding is tedious, Blesters over the Abdomen will be extremely useful. Dry Italic cannot be used at first, but afterwards as an adjuvant to open the Circulation.

379* Therefore we ought to anticipate the return of pain by C-S. and if this cannot be repeated, local Bleeding should be employed together with Blister.

380. When the Patient is of a full and Plethoric Habit we must be extremely active in our treatment, but when it occurs in old persons of a debilitated Habit and the Patient has been subject to frequent attacks of the Disease we must be cautious in the use of the lancet, and in general Local Bleeding, Purgatives, as small doses of Mercury, and the Hot Bath will be sufficient.

381 The Tobacco Lunge. \frac{ss} This is a dangerous remedy, therefore you should be very cautious in its use. D.C. has seen a Patient sink after it. In intussusception the mechanical distension of the intestines with water may sometimes tend to remove the spasm; Dashing cold water on the abdomen D.C. thinks a hazardous and unprepared remedy.

382 Attention should be paid to the Bowels and Diet, proper exercise must be allowed, and it is necessary to be particular in keeping the Body warm with proper Clothing.

9. The Warm Bath at the Temperature of 100. will be attended with good effect & the Patient should afterwards be placed between Blankets

When there is great sickness &c. has been freely employed. Calomel & Opium will be highly beneficial. Dr. has seen this Remedy ~~be~~ prove extremely useful after the Reduction for Strangulated Hernia when sickness & vomiting remains.

When there has been no sickness they may be joined with small doses of Sweet Peas.

3.^d Cathartics should not be given before Dr. has been fully employed, but when the inflammation begins to give way the Saline Cathartics will be found useful, but mild injections may be previously used with the view of removing any morbid collection in the large Intestines, and if there is more, they will act as a mild Stimulation to the Intestines.

Dr. has seen Cathartics joined with small doses of Opium given at the very commencement when the Patient only complained of Colic & pain, and they have prevented the Disease coming on.

But if the Disease does not depend on Scybala, or any morbid colluvies locked up in the Bowels we may with safety & free give Purgatives for two or three Days. In Peritonitis the Bowels are generally open, therefore we may employ Purgatives together with Dr. with advantage.

eventually to reverse any hurtful metastasis that had taken place—(F. 378)—by the warm bath and fomentations,—by rubefacients,—by Opium, either alone, or joined with Calomel, or certain other forms of Mercury, and occasionally with mild diaphoretics;—thereby preparing for—3dly, Rendering the intestinal canal capable of being safely and effectually cleared by suitable cathartics.—4th, Where the exciting cause consisted of hurtful ingesta, or other matters lodged in the intestines, and still continue to act,—to remove or abate their irritation,—by expelling, correcting, diluting, or inviscating them.

380. Observations on the individual means best adapted to fulfil these indications; and the extent in which they are respectively to be employed, according to the greater or less degree of *atonic* character which the disease bears,—to the particular circumstances of the case,—the causes inducing it, &c.

381. Remarks on certain remedies proposed in Enteritis;—Tobacco glyster;—Quicksilver;—Mechanical distension of the intestines by injections, &c.

382. Management necessary during the convalescent state, to secure a perfect recovery;—and afterwards, to guard against a future recurrence of the disorder.

OF RHEUMATISM.

383. A denomination of disease including affections which, though connected with, and often changing into each other, yet differ considerably both in their respective assemblage of symptoms, and method of cure.

384. Imperfectly described by Hippocrates, &c. under the ambiguous term of *αρθριτις*—first accurately discriminated by Ballonius, and by him called *Rheumatismus*;—original meaning of the name.

385. Most commonly distinguished into *acute*—and

chronic :—often denominated also from the part affected, as *Odontalgia*,—*Pleurodyne*,—*Lumbago*,—*Ischias*,—Insufficiency of these distinctions shewn.—Another proposed, accordingly as the inflammation is—(a) *tonic*,—(b) *atonic*, or—(c) altogether absent ;—(a) RHEUMATITIS (acute rheumatism of authors)—(b.) RHEUMATAGRA (acuto-chronic rheumatism,—Scorbutic rheumatism of Sydenham?—Rheumatic Gout)—(c.) RHEUMATALGIA (chronic rheumatism of authors,—*Arthrodynia*. Cull.)

386. CHARACTER OF RHEUMATITIS—Obtuse tensile pain, swelling, and redness,—attacking the larger joints more especially,—immediately preceded or speedily followed by Synocha fever (176),—generally accompanied by profuse partial sweats,—and often shifting its situation, with fresh exacerbations of fever :—lasting from two to several weeks, and then either going off entirely without desquamation, or changing to

387. RHEUMATAGRA ; in which the joints last occupied by Rheumatitis, especially the ancles, knees, wrists, and elbows, remain swelled, stiff, and painful, sometimes with Œdema, for many weeks, or even months ;—the pain generally aggravated at night, or by external heat,—but attended with little or no pyrexia,—and not followed by any chalky concretions.

388. RHEUMATALGIA. Often after rheumatitis or rheumatagra, but frequently also without any previous inflammation or swelling, certain joints or muscles become affected with pain and stiffness, felt especially on motion,—often accompanied by spontaneous coldness and even paralytic torpor,—relieved by external warmth,—and much influenced by atmospheric changes.

389. PREDISPOSING CAUSES OF RHEUMATITIS AND RHEUMATAGRA, (386-7)—Irritable and plethoric, or sanguineous habit ;—vigorous period of life ;—sex ?—*Female*

386 Sometimes however the smaller Joints are attacked. We generally find that Rheumatitis occurs in the earlier periods of life, Rheumatism in the middle, & Rheumatoidia in the latter, and in Persons who are much debilitated by previous Disease: It is most common in Spring when there is an unsettled state of weather. There is not affords any relief, but tends rather to exhaust the Patient's strength.



393. After the hardness of the Pulse has been relieved by
Dr. Pringle the exhibition of the Bark will be attended
with the most beneficial effect.
The combination of Tincture Peruvia. Colonal Hoffman has
been given with advantage at night. Here there was a
regular exacerbation of pain in the evening and this
followed by a purgation the next morning.
The bin Colchici is best adapted to Cases where there is
much uterine inflammation but where this is not the case the
same will be preferable & will under the Patent of our
stable of future Colicis, it should be given in substance
every six hours.

390. That which attacks particular joints is generally
owing to a draft of air blowing on the joint.

391. In joint rheumatism joints are affected, in Rheumatism the
larger. Rheum. occurs at an early period of life, Joint later,
Rheum. more frequent in Females; Persons who live cold
more liable to Joint, Rheum. more likely to be produced
on external exciting causes, as exposure to Cold, Joint not
urged in by so much Power as Rheum. and generally
accompanied or preceded by a Stomachic Affection, while
Rheum. is sudden in its attacks. Joint less liable to Metas-
tasis and does not shift its situation so often as Rheum.

There will be much difficulty in distinguishing Rheuma-
tism from Syphilitic pains, but unless there is any
syphilis in the system it seldom attacks cylindrical
Bones, and in general follows the occurrence of Muscles
and is continued in the joints.

Joint seldom attacks Females before the cessation of the Men-
strua.

392. The most frequent metastasis of Rheumatism is to
the Heart & Pericardium.

393. V.S. in young & plethoric Subjects, but it must ^{not} be
carried to the extent recommended by Dr Boerhaave.
Leeches to the joint will relieve the Effusion & sometimes
completely remove it. D.C. does not approve of Dr.
Hager's mode of exhibiting the Bark, but after V.S. &
leeches has been employed & the attack appears the remittent
form, it will be extremely useful; Phalaris & Calomel
or Colley with Calomel given as Purges; Sudorifics
have been condemned in this Complaint as it is generally
attended with Perspiration, but if the Antine. prepare-
tions they will be found to produce a more healthy
perspiration. Bleeding &c has been attended with suc-
cess than the usual treat of giving Digitalis &c.

Drury used to recommend V.S. followed by smart
Purging, afterwards Calom. Ant. & Opium at bed time,
and the big common Ant. with Vin Ant. & the Digital.
during the Day.

• 5 or 6 of Phalaris Colchic three times a Day

indolence,—changeable climate and season;—(b.) preceding attacks;—scorbutic (?) habit;—mercurial irritability.

390. **EXCITING CAUSES**;—Cold suddenly applied, especially when the body is overheated or fatigued;—certain unknown changes of atmosphere;—general febrile commotion however produced.—Syphilitic taint?

391. **DIAGNOSIS**, sometimes difficult between Rheumatism and Gout, not only from their general resemblance, but from their being frequently combined:—circumstances commonly distinguishing them, — in the patient's age, —sex, —condition and mode of life, —hereditary tendency, —exciting cause, —mode of attack, —symptoms during the progress—and, termination of the complaint—Rheumatic pains, how distinguished from syphilitic ones.—General character of rheumatic inflammation; and an examination of the humoral doctrine respecting it.

392. **PROGNOSIS IN RHEUMATITIS**—in general favourable as to life; but sometimes metastasis suddenly takes place to the brain, chest, or stomach, and proves quickly fatal:—instances of each of these.—Tendency to relapse.—Symptoms denoting a favourable termination.—**RHEUMATAGRA** generally tedious and difficult of cure; and in scrophulous or cachectic habits, sometimes ends in a state of the joints very analogous to white swelling.

393. **TREATMENT OF RHEUMATITIS**;—Venesection; caution against the Boerhaavian notion respecting it.—Leeches.—Blisters?—Purgings,—different modes of proper, according to the period of the complaint, &c. Diluents—Sudorifics?—rules for their management.—Nitre?—Digitalis.

394. **PROGNOSIS IN RHEUMATAGRA**.—This disease not immediately dangerous; but generally obstinate

as well as painful, especially in scrophulous and phthisical habits, and when combined with syphilitic taint.

395. TREATMENT OF RHEUMATAGRA ;— Mild diaphoretics ;—tepid bath ;—local bleeding ;—blisters ;—tonic bitters, as Cinchona,—Mist. Myrrhæ cum Ferro, &c. ;—diffusive stimulants,—*Dec. Dulcamaræ?*—*Mercury*,—*Pil. Calomelanos cum Antimonio*.—Sudatorium ;—Douche ;—Electricity? or Galvanic aura.—Salt brine.—Vegetable, and Milk or Whey diet.—Sarsaparilla.

396. PROGNOSIS IN RHEUMATALGIA. In general more easy of cure than Rheumatagra, except in elderly persons, and when it takes the form of Ischias.

397. TREATMENT OF RHEUMATALGIA ;—Diffusively Stimulant diaphoretics, e. gr. Guaiacum,—Ammonia ;—*Sem. Sinapeos*,—*Infus. Raph. rust.*—*Dec. Mezerei* ;—*Rhododendron Chrysanthemum* ;—Slow Mercurial process.—Sulphur ;—*Ol. Terebinth* and—*Ol. Jecoris Asellii*, &c.—*External remedies* :—Tepid and vapour bath ;—various epispastic, rubefacient,—and stimulant plasters, liniments, and embrocations ; Cabbage leaves.—Friction, Champooing ;—Electricity,—Galvanic aura :—actual cautery,—Moxa.

398. Of the choice and management of individual remedies, according to the circumstances of the case ;—and account of the composition of some boasted empirical articles, e. gr. Essence of Mustard,—Mustard Pills,—Guest's embrocation, &c.

399. Observations on the most effectual means of guarding against rheumatic affections, by proper clothing,—exercise,—friction, ^{after the} cold bath, &c.

OF THE GOUT.

400. GOUT a general term, including, like Rheumatism, a number of morbid affections differing greatly

3.8 of the is much pain and heat in the Joint, taking
away a small quantity of Blood will be found useful,
but we must principally rely on Leeches over the Joint,
followed by Fomentations; Misture will be also given
afterwards; Iron Bitters will be necessary to support
the Strength, as the Bark with the Vol. hint offensive,
it is sometimes given alone, & is w. with some Diluent.
But in Chlorotic Dermatitis the Bark in combination with
Steel will be better; Ammoniac or Sph. B. being
given. Stimul. will be applicable to elderly Persons and Lymphatic.
Habit. When we suspect there is a Syphilitic Taint a
mild mercurial course will be proper, as will Plume & Decoction
course - but particularly in Scroph. Habit. The Sudatorium
is placing the Patient in a heated Room; Douche is pouring
cold water from a height and afterwards employing frictions.
This is a useful remedy particularly when there is Oedema.
Salt Brine will be very beneficial in Scrophulous Habit.
A thick Vegetable Diet in the first attack, but in old Persons,
and in Scrophulous Habit, a small quantity of Meat must be
allowed - When we find Persons particularly affected by the
change of Weather they should go to a more uniform Climate.
~~After the hardness of the Pulse has been relieved by Bleeding,~~
~~the exhibition of the Bark will be attended with~~
~~the most beneficial effect. The combination of Part. Antim.~~
~~Calomel & Opium has been given with advantage at night~~
~~when there was a regular exacerbation of pain in the dose~~
~~followed by a Purgative, the work becoming~~
Mercurio & principally rely on Cold Drafts, and the best
remedy is the Cold Specific.

399. Flannel should be worn next the skin and in
Summer Calico. Exercise should be taken regularly
but in moderation; After a Person has been laboring
under Rheumatism, he should begin with the Tepid Bath,
and gradually open the Heat until he is able to bear
the cold Bath, which will be very useful in preventing a
relapse.

394. The Unders of Guaiacum & Sandalum; the best form
of exhibiting the Amer. wood & Storciadish is the Infus.
Armora. (amp. When there is any eruption on the skin
the preparations of sulphur will be useful. Dr C. has
given the *U. Trichiath* in doses from ℥ss to ℥i diluted
with five times its weight of Honey with advantage,
in the Stricture in forms of Doctins, but it acts on
the bladder its effects much is waited. Dr Brandy
has given Bowlers Mineral solution in Stricture & Hemorrhages
of the complaint with success where other Remedies have
failed, but it is not a remedy which should be preferred.
The vapour Bath will often succeed where the *Liquid*
has failed. Dr C. recommends the combination of Camphor
& *U. Trichiath* in the form of *Thiethen*, or *U. Trichiath* &
applied over the part & renewed once in 24 Hours.
The juice of the Briary Root has been found successful
as a Rubefacient, it produces an eruption presently.
Chamfaring that is gently & vigorously & even beating the
part affected, while in the warm Bath, has been used above.
General Dietition is one of the most useful remedies we
possess in this disease and also to prevent a relapse.
Electricity should not be employed if there is any Inflammation
going on in the joint, the galvanic Cure will be
more advantageous.
It is especially necessary that attention be paid to
the Bowels.



1101. Podagra when in the Foot, foragra, in the arm,
and Cheragra in the Hand.

402 The Joint is generally acutely painful, and Swollen.
It is in old persons generally attended with Acidity.
The Disease has usually a regular evening exacerbation
and it commonly occurs in the Spring & Autumn. When
it occurs in young persons and for the first time it
usually attacks in the morning (about 2 or 3) without any
previous illness.

403 Rheocidal Joint seldom attacks young Persons,

404 Sometimes the Affection of the Stomach is Inflamed
at times what is called the Ice Bolt this is a dangerous
symptom. The Bladder is often affected with Catarrhes
 Vesicae. It will often be difficult to distinguish between
these and the Prostatic forms of the Gonorrhea, but
they are generally of the Passive Character.

both in their symptoms and seat, but all arising from the same primary cause.—The *αρθριτις* of the ancients;—the *Podagra* of Boerhaave and Cullen:—*Fr. La Goutte*—origin and meaning of these names.

401. Sometimes denominated from the part it affects, as *podagra*,—*gonagra*,—*chiragra*,—&c.;—but the division into *regular* and *irregular*, or rather into *tonic* and *atonic*, the only one practically useful.

402. CHARACTER OF TONIC OR REGULAR GOUT;—Pain, swelling, and bright redness, suddenly affecting the joints of the feet or hands, and especially the ball of the great toe,—generally preceded by some unusual affection of the stomach;—followed by symptomatic synocha,—and going off by gentle universal perspiration, with sediment in the urine, and itching and desquamation of the part.

403. RETROCEDENT GOUT.—Sometimes the pain, swelling, and redness which had begun in the extremities, suddenly go off, and colic, delirium, &c. take place.—This more especially the case, where the regular course of the paroxysm is improperly checked, or where slight and fugitive pain, &c. with dyspepsia, and various anomalous symptoms, mark the *atonic* form of the disease.

404. MISPLACED GOUT.—At other times, instead of the extremities, the stomach, brain, lungs, intestines, kidneys, or bladder, become affected with disturbance of function, which immediatly gives way upon the inflammation appearing in the extremities.

405. PREDISPOSING CAUSES;—Original constitution, often hereditary;—middle and advanced age?—virility;—full living,—neglect of exercise;—weakness of stomach;—fermented liquors of the acescent kind;—the application of lead.

406. EXCITING CAUSES:—Occasional excess in

wine or spirits ;—sudden vicissitude of temperature, from variable climate, season, or exposure ;—sprains or other injuries ;—Passions of the mind,—anxiety,—intense application to study or business ;—excess in venery, &c.

407. DIAGNOSIS.—Marks generally distinguishing Gout from Rheumatism (391) ;—the two sometimes combined. The symptoms of *atonic* gout extremely numerous and proteiform,—often appearing as dyspepsia, hysteria, hypochondriasis, asthma, palpitation, syncope, vertigo, apoplexy, paralysis, &c. &c. according to the original or acquired tendency to those diseases ;—and thereby making the discrimination between it and several other disorders, occasionally very difficult.

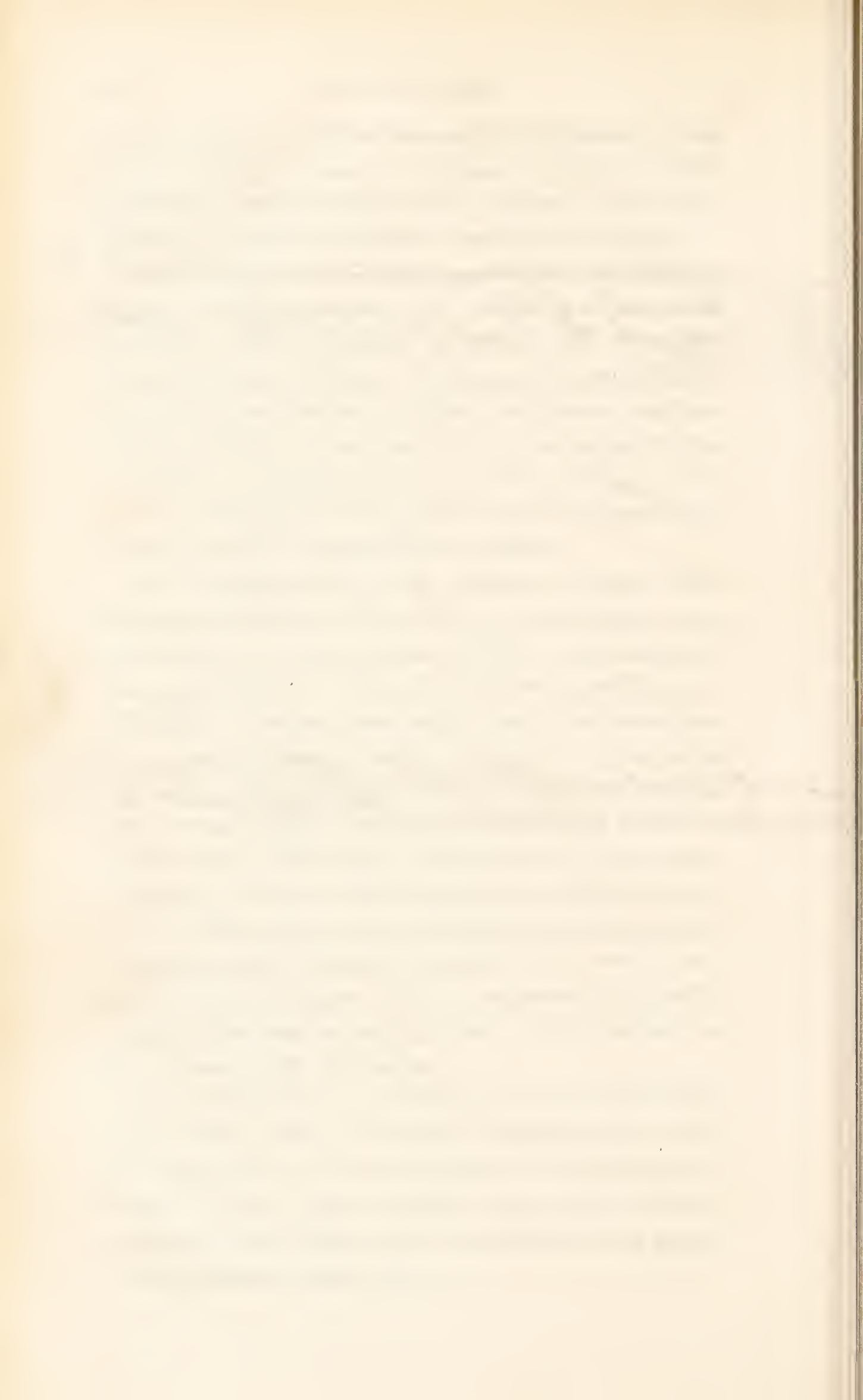
408. Consideration of the question whether Gout primarily a disease of the *solids* or of the *fluids*,—with an account of the subordinate theories.—Arguments for a *morbific matter*,—others for the nervous pathology ;—difficulties attending them singly,—and conclusion that Gout is a compound disease.—Conjectures respecting the nature of gouty inflammation ;—its analogy to phosphoric combustion shown ;—and application of this to explain many difficulties with respect to the causes, symptoms, and cure of the complaint in different cases.

409. Discussion, whether regular fits of Gout remove or prevent *other complaints*, or rather, *other* and *anomalous forms of the same disease* :—arguments in the affirmative, illustrated by striking cases ;—with strictures on the opinion of Dr. Heberden.

410. PROGNOSIS, twofold, viz. 1st, as respects hazard to life ; 2dly, as regards permanent cure ;—To be drawn from the circumstances of constitution,—habit of body,—age,—condition and mode of life,—particular form of the disease,—its duration and effects,—its metastatic tendency, &c.

407 One of the most common forms of Atonic Scurv
is Diarrhoea, also Colic.
When it attacks the lungs &c. it is seldom with acute
Inflammation.

408 Dr. Ferrius inclines to Dr. Cullen's theory that it originates
from some alteration in the Nervous Function.



413. In young & Plethoric Habits, where the soul has fallen on the Stomach, Chest or Brain. The exhibition of heating or powerful Stimulants, will be hurtful, but the Anti-Phlogistic treatment will be more advantageous. In old persons we must principally rely on local depletion. Blisters, active & diffusive Stimulants. The Hot Bath will be extremely useful in both, together with the Blister & Scapular to the Feet.

412. In strong & Robust Subjects, Dr. thinks that Phlogistic with moderate doses will be extremely useful at the onset, particularly when it is a newly acquired Disease, but when the Patient has been long subject to it not so. An emetic may be resorted to when it comes on after a full meal to unload the Stomach: as a Cathartic give Elix. Colic. & Hyd. submer. at the same time some Alkali. Sait. as Magnesia to correct the Acidity in the Primæ viæ & the Cardiac Symptoms of Rheis. Some Opium. The Temperature of the Room should be 60 Fahrenheit. The application of cold Water is a dangerous Remedy unless it be in a strong & Robust Subject when it may be used without much risk.

In the Atmosphere the vapour of Bath & Steamy Room will be found useful, particularly to Persons who are frequently subject to it, but in the acute stage it will be injurious, from its causing an accumulation of Heat. Dr. Sutton states that he has exhibited Opium with Elix. Colic. with advantage, but other Phys. have tried it without any success. After the Bowels have been freely opened you may give Opium with Diaph. as Pate Spec. & Anti-Tonics will be proper in Persons who have been subject to it.

414. In young Persons we should direct complete abstinence from fermented liquors, animal food &c, but in elderly Persons who have been frequently subject to this Disease a small quantity of plain & digest animal food should be allowed, with Elix. Colic. as therapy, or if this turns Acid in the Stomach, a little Spirit.

411. THE TREATMENT of Gout necessarily various, accordingly as the disease is—*tonic* or *atonic*,—retrocedent,—misplaced,—hereditary or acquired ;—but chiefly resolved into that required *during the fit*,—and that proper *during the interval*.—The principal indications are, 1st—

412. IN THE PAROXYSM,—to moderate the violence of the inflammatory symptoms,—and conduct the disease with safety to its natural termination ;—By Venesection?—Emetics?—brisk cathartics?—gentle laxatives, diluents, and mild diaphoretics :—regulation of temperature ;—application of cold water,—the circumstances and management necessary to render it safe ; and various cases of its fatal effects related.—Remarks on the opposite plan of—vapour bath,—oiled silk,—fleecy hosiery, &c.—External applications,—Soap plaster or Cerate,—Native Oil of Camphor, &c.—Opiates ;—tonics.

413. 2dly, WHEN RETROCEDENT OR MISPLACED, to recal it to its proper seat in the extremities ;—By local evacuations from the affected parts ;—blisters, and rubefacients to the extremities ;—Opiates, and diffusive stimulants, as Vol. alkali—Camphor,—Musk,—Wine,—Spirits, &c. very hot Pediluvium alone, or with oxygenated Muriatic Acid.—Liniment with Phosphorus?—Doubts respecting the propriety of some of these in certain cases of retrocedent gout, and success of an opposite plan illustrated by cases.

414. 3dly, IN THE INTERVAL, to remove the effects it has produced, and obviate its recurrence,—by diet and regimen adapted to the form of the complaint and circumstances of the person.—By very moderate use of, or entire abstinence from—fermented and spiritous liquors,—animal food,—excessive study,—and

sexual pleasures :—Regularity in exercise and sleep ;—friction ;—Cold bath ;—employment of bitters, and other tonic medicines ;—antacids—warm laxatives.

415. Account of the chemical composition of chalk-stones, and the methods that have been proposed for their removal.

416. Remarks on particular remedies, and modes of treatment :—Guaiacum ;—Semen Sinapeos ;—Ginger ;—Cajeput Oil ;—Sulphur ;—Bath and Buxton water ;—Cicuta ;—Dulcamara ;—Le Fevre's specific ;—the Portland Powder ;—the bad consequences observed to follow this powder, accounted for.—Buzaglio's method ;—Mr. Welles's remedy.—Eau Medicinale de Husson.

CATARRH.

417. Derivation, and meaning of the term.—*SYN.* *Destillatio* of Celsus—*Anglicè*.—A Defluxion,—A Cold.

418. *DEFINITION* ; Inflammatory state of the mucous membrane lining the nose, fauces, trachea, and bronchia, with pyrexia ; often epidemic, and sometimes contagious.

419. *SYMPTOMS* ;—Fulness of the Schniederian membrane, with subsequent increase of secretion,—progressively extending to the fauces, trachea, and lungs, and causing a sense of rawness and soreness of these parts, accompanied with more or less cough and expectoration :—Stiffness, and often great tenderness of the skin round the nose and eyes ;—gravedo ;—dulness and confusion of thought ;—stiffness and soreness of the cervical muscles ;—general lassitude and aching of the limbs ;—occasional chills, particularly along the spine ;—quickened pulse ;—increased heat ;—dryness of skin ;—whiteness of

414. Imitation is one of the most powerful remedies we have to prevent the ill effects resulting from this Complaint; a bandage either of Stannic or Calico round the joints which have been affected will also tend to prevent it, feathers attack.

Long continuance of Bitters will be prejudicial as they prove narcotic; the common Garden Scurvy is one of the most harmful Bitters that can be given Dr. Scurvy has used for a long time with advantage. In weak & debilitated Stomachs Cascara Sagrada is the best, Gentian and Colombar are sometimes given.

Thapsia is the best antacid that we possess in this Disease as it unites with the Acidity in the Prime Vicia and acts as a Purgative.

Roche's fort. Medicine is a useful warm Laxative of Rhubarb; Sol. Senna, & some Candian & Cocaine Seeds, dyed in a one part of Proof Spirit.

415 The best mode that we can adopt for their removal is to keep the parts warm with Poultices, and when they excrete to dress them with some mild ointment and apply Peruvian Acid. Sometimes they are seated in the Cellular Membrane, more frequently in the Muscular Membrane, even in the joints unless the Septa excrete, I have seen them in the Cellular Membrane in the middle of the Uterus; The Composition of Salt Stones is little Acid with Soda the former being in excess -

416 The Comp^d Powder of Specimen will be a useful Purgative when there is any disruption on the Skin the Decoction will be better. A Table spoonful of Mustard Seed will be a very good warm Purgative. Super Sea Drank instead of common Sea will be found a useful warm stimulant and has succeeded in preventing attacks of Gout. A French Specific is supposed to be the Sulphate of Lime Burzaflo's method of cure, consisted in using violent exercise of the part affected. The Chinese Peruvian Salt Medicine which was much used formerly is $\text{Sulphur } \frac{3}{4}$; $\text{Rhin } \frac{3}{4}$; Cream Tartar $\frac{3}{4}$; Sugar $\frac{3}{4}$; Sulph $\frac{3}{4}$; Oil $\frac{3}{4}$; the Oil of Colchic is lately brought into notice and supposed to be similar to Addison's Medicine it is frequently found to be productive of a good effect. N.B. says before he has recourse to any of these Remedies he should open the Bowels with some Purgative. He has taken the Emetic Medicine but he found it produced no remission of the Gout therefore he was obliged to repeat it, altho it entirely relieved him.

419 Inflammation favourable symptoms and is generally attended with a remission of all the symptoms.

420 Cataplasms seldom produce its effects in less than a week or ten days.

422 When the Inflammation extends beyond the Bronchitis or its Vanification, it must be had recourse to, as it is very likely to give rise to Phthisis in Persons predisposed to it, also laxatives & Diaphoretics, ^{afterwards} Blister and Opacities combined with Draughts given at bed time which will generally increase the secretion of mucus & determination to the Throat; when the Disease assumes the Chronic form particularly after the former affection, Diet is Restrictive as Family in old Persons Cinchonine, Gum and Senega, Decoction with nitro dissolved in them will be useful; when there is much difficulty in bringing up the expectoration & Dyspnoea the use of other should be inhibited.

423 When it attacks old Persons it often proves fatal; in this complaint local Bleed. & Blister will be more safe than to, but in young Persons when the Disease attacks the lungs to, must be had recourse to.

426 Phthisis Pulmonum has been known to run thro its course without being accompanied with any prominent expectoration.

tongue ;—evening exacerbation and morning remission of fever.—Eruptions about the nose and mouth.

420. PREDISPOSING and EXCITING CAUSES ;—individual disposition :—sudden change of temperature, and especially cold applied to the head, neck, and chest ;—certain states of the atmosphere operating extensively, and giving rise to an *Epidemic Cold*, or *Influenza* ;—Contagion.

421. Account of some of these Epidemics, particularly that of 1782, and of 1802-3 ;—their general and peculiar symptoms ; and their respective results.

422. TREATMENT of SIMPLE CATARRH, or that arising from ordinary causes ;—laxatives, —diaphoretics, —pediluvia, —blisters, —bloodletting, —Opiates ;—demulcents, —expectorants ; —emetics : —Inhaler ;—remarks on these.

423. TREATMENT of EPIDEMIC CATARRH, or *Influenza*, to be regulated not only by the constitution and habit of the patient, but—by the general character, —and peculiar or urgent symptoms of the disease ;—and especially, by the sudden change which often takes place, from an apparently active inflammatory state, to one of great prostration.—Illustration of this, drawn from the history of such epidemics, particularly that of 1802-3.

424. For the treatment of chronic Catarrh, see Phthisis.

OF PHTHISIS PULMONALIS,

OR CONSUMPTION OF THE LUNGS.

425. Derivation and meaning of the name.

426. CHARACTER ; — Cough, hectic fever, —and puriform (266) expectoration, —accompanied with ge-

neral emaciation and debility,—and succeeded by colliquative sweats, often alternating with diarrhœa.

427. Symptoms very various both in number and degree, in different cases—sometimes from obvious causes, often from unassignable ones ;—and hence dispute whether the pulmonary affection be the primary and essential cause,—or whether merely an accompaniment of the general disease. Consideration of this point.

428. The symptoms that more commonly occur, are—Cough, either frequent, and teasing, or occasional and severe ;—sometimes dry at first, oftener with expectoration of tough phlegm, blackish mucus, or of puriform matter, sometimes streaked with blood :—Dyspnœa ;—dull and oppressive, or sharp and shooting pain in the chest,—but sometimes neither :—Tongue generally foul, —often morbidly clean and red,—occasionally quite natural.—Skin in general dry and hot, but especially the palms of the hands, and soles of the feet,—with circumscribed flush on the cheeks ;—often, transient chills,—more commonly, a regular febrile paroxysm morning and evening, with nocturnal sweats. (*Hectic Fever*).—Mind little impaired ; sometimes more acute—and generally confident of recovery ;—but decay of the bodily functions shewn by,—gradual loss of flesh and strength, pearly whiteness of eye,—incurvation of the nails, and sometimes loss of the hair.—Appetite variable,—generally impaired, but occasionally craving, and sometimes good to the last.—Vomiting after eating.—Colliquative diarrhœa, alternating with the night sweats.—Œdema of the feet and legs, with apthæ of the fauces, and occasional delirium, often precede death.

429. PREDISPOSING CAUSES ;—Original, and often hereditary tendency ;—marked by irritability and weak-

428 sometimes only a constant weak and un-
der the Patient also complaining of dyspnoea
slight dyspnoea on taking exercise, or it may come
on at night.
Often observe a peculiar dusky red colour on the back
of the head ^{extending} up the arm and to the tip of the finger.
The flush on the cheeks coming on after meals or
at night.
Cough after meals which causes the food to be brought
up after which the Patient is easy

Some suppose that Aphthae do not take place but when
seen are ulcerations of the mucous membrane lining the
testes, but this is not the case as Dr. G. has found from
dissection.

Acute Phthisis Pulmonalis in Dr. Jones's Lectures

2. *Introduction*

The purpose of this study is to investigate the effects of the proposed system on the performance of the participants. The study was conducted in a laboratory setting with a sample of 20 participants.

The participants were divided into two groups: a control group and an experimental group. The control group used the traditional system, while the experimental group used the proposed system.

The results of the study showed that the proposed system significantly improved the performance of the participants compared to the traditional system. The improvement was statistically significant at the 0.05 level.

The study also found that the proposed system was more user-friendly and easier to learn than the traditional system. The participants in the experimental group reported higher satisfaction levels than those in the control group.

The results of this study suggest that the proposed system is a viable alternative to the traditional system. Further research is needed to confirm these findings and to explore the long-term effects of the proposed system.

The study was limited by the small sample size and the laboratory setting. Future studies should include a larger sample size and a field study to assess the effectiveness of the proposed system in a real-world environment.

The study was funded by the National Science Foundation. The authors would like to thank the participants for their contribution to the study and the reviewers for their constructive comments.

The authors declare that they have no conflict of interest. The data generated during the study are available upon request.

The study was approved by the Institutional Review Board of the University of California, Los Angeles. The participants provided informed consent before participating in the study.

The study was conducted in accordance with the ethical standards of the Institutional Review Board of the University of California, Los Angeles.

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The study was presented at the Conference on Human Factors and Ergonomics, 2018, San Francisco, CA.

The study was supported by the National Science Foundation grant number 1545555.

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Patristonians

420 Labour occurring in Butchers and in those whose employment necessarily exposes them to the vicissitudes of the weather and consequently makes them hardy -

It is not improbable that if a Person threatened with consumption, before any disease takes place in the lungs, changes his occupation for one which requires greater exertion, and exposes him more to the inclemency of the weather, that he may prevent its coming on.

431 Tuberculous matter may remain a considerable length of time in the lungs without producing any symptoms, but when it ulcerates into the Bronchial Tubes it causes Cough and is thus brought up.

ness of the vascular system, especially of the lungs,—and by frequent catarrh or hæmoptoe.—Scrophulous habit, laying the foundation of tubercles.—Narrow or deformed chest.—Earlier period of adult age.—Variable climate ;—local quality of the air.—Inquiry why so frequent in England ;—and why certain trades particularly free from phthisis.

430. Observations on certain marks considered as denoting the phthisical tendency ;—Sanguineous temperament,—fair soft skin and hair,—light eyes ;—tall and thin person,—long slender neck,—projecting shoulders ;—long fingers, with very convex nails ;—unusually white, and sound teeth.—Opposite description of persons in whom also the disease occurs ;—middle or low stature—opaque skin,—dark hair and eyes,—dilated pupils,—tumid upper lip ;—short fingers, with truncated nails ;—Forms which it respectively assumes in each of these.

431. EXCITING CAUSES ;—Pneumonia,—Catarrh,—Measles,—Small Pox,—Whooping Cough,—Various Fevers.—Spontaneous Metastasis, or repressing of certain eruptions ;—Sudden variation of temperature ; neglect of covering the breast and neck ;—certain unknown condition of atmosphere.—Frequent over-exertion in speaking, singing, or blowing musical instruments.—Compressing the chest by tight bands, stooping posture, &c. Inspiring certain kinds of dust or vapour.—Substances accidentally lodged in the trachea.—Inhaling the breath of persons in the advanced stage of phthisis ?—Hæmoptoe :—mechanical injury of the lungs, from blows, &c.—Formation of calculous matter in the lungs.—Communication of hepatic abscess (343).—Syphilitic taint ?—Mercurial irritation.—Febrile irritation from Worms.

432. Appearances on dissection, illustrated by pre-

parations, and connected with the previous symptoms,—dividing phthisis into *three* principal species, viz.—A. the *vomical*.—B. the *catarrhal*.—C. the *tubercular* ;—and explaining many particulars observed in the rise and progress of the disease,—the effect of remedies,—and the final result.

433. Account of the different opinions entertained respecting tubercles. Their true nature, and their variety, illustrated by preparations ; and the different appearance of the *sputum* explained from thence.

434. Description of hectic fever, and discussion of the several theories offered to explain it ;—general debility,—defective assimilation of chyle ;—suppurative inflammation ;—absorption of pus ;—abstraction of nourishment ;—hyper-oxygenation of blood ;—general state of the system.

435. Tests proposed to determine the purulent nature of the expectoration :—inutility of them shown, and obvious characteristic marks pointed out.

436. DIAGNOSIS.—Symptoms distinguishing idiopathic Phthisis from Catarrh,—Vomica,—Empyema,—Chronic Hepatitis, &c. :—these, however, often fallacious, and why.

437. PROGNOSIS ;—to be drawn from—the mode in which the disease arose,—its duration,—and its slow or rapid, its interrupted or uniform progress,—the number and degree of the symptoms present,—and the effects already produced. But slightest symptoms alarming, where hereditary tendency traceable.—Has been sometimes removed? by supervening insanity, or typhus fever ; and is *often suspended* by pregnancy :—instances of these.

438. THE TREATMENT OF PHTHISIS will depend

232 In Consumed Phthisis the early symptoms resemble those of Pneumonia, the Patient generally complains of a dull aching pain in the lungs; also legs, when the Abscess bursts he expectorates Pus, we find also that more matter is expectorated in one situation than in another, thus if he lays down for some hours he is not troubled, but on arising with a copious expectoration takes place, the Patient lays down on the side affected.

The symptoms of the Catarrhal form are a cough, thin and dry expectoration, afterwards more, the Patient will be able to expand his lungs fully and drawing in air, and can lay equally well on either side, generally dies from the copious expectoration, sometimes there is disease of the lungs -

The Tubercular Phthisis is very insidious in its attack, the Pulse soon gets thin, cough, dyspnoea at night, little, tearing and harassing cough, sometimes however more, slight expectoration, sometimes mixed with blood, slightly haemoptysis, pain produced by laying on the side affected, and by drawing in the breath, also difficulty expanding the lungs.

The Catarrhal form is more under our control than the other, sometimes under our remedies, it gives way by a free expectoration, as an example where Spina was from three inches away to allow the lungs and chief of Lungs Rose his was ordered with a view of moderating the symptoms, and in a month the Patient recovered -

The Tubercular form will sometimes appear to give way to remedies, but we generally find the Pulse remains so. The Dyspnoea will be brightened by exercise and there will be inability of expanding the lungs -

236. From Catarrh, by the cough which is drawn and attended with a rattling sound, not always however, but the coughs from the Phthisis will generally allow to decide - a From Consumed, by the cough being first dry, ^{afterwards} then the Patient expectorates a large quantity of matter which liquefies gradually, it admits of cure, the Pulse at the same time being softened from Impetua, the Patient being only able to lay on the side affected, for when on the other it produces cough which is dry, sometimes the matter purges -

237. Tubercular Phthisis sometimes remains many Years before it terminates in Death.

1.3.3. Tubercles do not appear to be glandular, but
according to Dr Bailey are formed in the cellular
^{texture} ~~matrix~~, at the time a vascularity cannot be seen,
etc. They must be so, for how could matter form in
the middle were it otherwise?

2, 3. Sometimes the Chills return in the middle of the hot fit; when the sweating stage comes on it does not so in intermittents relieve the symptoms, but generally exhausts the patient.

Mr. Harter was of opinion that Kintie's fever was
in consequence of the irritation produced by long
continued local disease. But it is almost likely
to be owing to debility produced by long continued disease.
We are often ^{led} to think that female slaves have brought on by long
suckling their children very long by giving suck to
strengthen the system that they receive. -
Kintie soon very frequently came on after eating

L. 35 De Gray's mode of ascertaining whether the ex-
position be good, is, putting it between two pieces of
plate glass and looking thro' them at a distant land
when you observe different colours with the land
in the middle, first blue, then green and inside red &c.
these may or may not be bright -

these now or less bright -
Of them, the appearance will decide, as the best
might appear surrounded by a clear serum, in
the tubercular form there will be a large quantity
and if the disease has existed a long time it will
emit an unpleasant odour -

On agitation. Put in water it becomes flocculent, not so much when it remains for some time. It is generated

much as it is a means for it -
When the expectoration is of an ash colour there is generally
considerable disease in the lungs, which will prove fatal.

436^a But we after find Bi. Pth. is brought into action by fatary. *et* I am convinced that this is

b. More frequently however we find that there are several cornua in the lungs and it terminates in

Phthisis. - In this the lungs are only affected from irritation the cough coming on in Paroxysms, and the expectoration consisting of a thickropy mucus sometimes tinged with purpurous blood, at the same time the Patient will complain of a dull heavy pain in the right side - indigestion &c -

a. In scrupulous Habits, where there are frequent slight attacks of Inflam^t: the insertion of an Issue will be useful.

1. Dr. Saunders gave the Symp^t next time with Opere-
cution in Boluses with great advantage. In the second stage
Dr. has seen the Symp^t with Citric Acid useful.
It may also be given in a Bolus with the Saline Dr. having
an excess of Alkali.
Lichen Blaud. in the form of Decoctum will be a useful Bolus.
Lime Water & Milk will frequently check Diarrhoea.
Bovism^t should only be taken when the Patient is free from
the Heat & exacerbation. An instance mentioned of the good
effect of the change from a sparse to a generous Diet, the
Patient having completely recovered, but when there is any fever
occasional Inflam^t taking place, or much irritability, we
ought not to allow this kind of Diet. Milk will be rendered more
easy of Digestion by mixing it with Lime or Soda Water. Off's
Milk is considerably lighter than cows and contains more sac-
charine matter. Flumm^t consists of Mares Milk mixed
with a small quantity of Wine and it is equal to Apt's Milk.
Myshanic^t is the Linchpin when there is much Heat
from. - Dr. of Manchester recommends it joined
with Lute^t. Honey be given with Steel / Rins & Rins
- cure of Ammoniac^t when occurring in Phthisical P.
Dr. has given it in chronic Ph. joined with Bark in the
saline Dr. with an excess of Alkali.
When there is an Irritation in the Bowels the Lichen
must be taken.

iv. When there is no hereditary tendency and it assumes the Catarrhal form, or when we have reason to expect that there is disease in the lungs, as bronchitis, Bloodletting should certainly be had recourse to; but in Persons predisposed to it we should only induce occasional small bleedings. The late Dr. Leary of New York stated, that a venal quantity of blood taken away from himself produced Delirium, and he thought that its being frequently repeated kept off the Disease for some time. Dr. C. thinks local Bleeding preferable in delicate subjects; Dry Cupping has been recommended where blood could not be employed or blood has been treated locally.

In the Catarrhal form Diaph. & Mucif. will be extremely useful. Dr. Simpson has lately been brought into notice in the form of a poultice. Dr. Simpson of N. York. Dr. C. has used a Poultice of Agaric Boissier's Acid, - Sulf. of Iron & Illusion. When there is a hot & dry skin with thirst we shall generally be disappointed if we apply a Plisty.

B. The Vesicatory will be the best form of administering the Digitalis. The Prussic Acid has lately been brought into notice, it acts powerfully on the Heart & Arteries, but does not appear to be superior to Digitalis. Spontaneous may be given in small doses and in the mildest form. Acetic & Hypos. when they are sufficient to abate Irritation will be preferable to Opium as they do not produce Constipation. Sassafras may be given where we have any reason to suspect any difficulty in the Lungs. There is an exception on the skin, & in cases of Breathing an Air composed of 1 quart of Hydrogen to 15 of Atmospheric Air has been tried with success; in the Catarrhal form inhalation the Steam of warm water will afford relief; where there is any Phlegm amongst the Chest inhalation the vapour of Aether will be useful.

When there is considerable Irritation attended with slight Inflammation Opium in the form of the Extract or Syrup of Poppy will be extremely useful. Carbonic Acid gas being a powerful sedative may be employed advantageously?

D. We often find that during the progress of Plethorism that first symptoms of Inflammation attack the Chest and Patients are often harassed with a troubling Diarrhea.

much upon the nature of the predisposing and exciting causes, and the particular form which the disease puts on (432);—but especially upon its being—(a.) accompanied with considerable inflammatory irritation,—or—(b.) marked by great general loss of *power* (117, 137, 252-4).—The chief indications, therefore, are—

A. To diminish inflammatory action,—By Occasional small bleedings?—cupping,—leeches;—dry cupping;—Blisters;—issues;—setons. —Refrigerents—Nitre?—Crystals of Tartar;—Acids;—Infus. Rosæ cum Sulphate Sodæ vel Magnesiae.

B. To lessen irritability both local and general;—by Digitalis:—Acetas Plumbi?—Opiates;—what kinds best, — most effectual modes of administering them.—Cicuta.—Hyoscyamus:—Sarsaparilla.—Breathing different kinds of factitious or modified air.—Inhaling vapour of warm water,—Æther, &c.

C. At the same time, to support or increase *power*, as far as is consistent with the two preceding indications:—by Mild tonic bitters;—Myrrh;—Lichen Islandicus;—Lime Water and Milk, &c.—Light and nourishing diet, adapted to the patient's digestive powers; but, in general, consisting chiefly of ripe saccharine or subacid fruits, and other vegetable matters, joined with Milk:—Varieties of Milk, and its preparations:—Ass's milk—Cow's milk — butter-milk;—Goat's-milk whey;—Koumiss.—Bristol Water?

D. Throughout the progress of the treatment,—to check all urgent symptoms,—and to obviate as far as practicable, such of the exciting causes as may still continue to act.

439. Modifications of treatment especially necessary under particular forms of the disease.—Remarks on certain remedies occasionally employed; and inquiry into

the nature of the case, and their probable *modus operandi*, when beneficial ;—Mercury ;—Petroleum and its Oil ;—Bals. Cōpaibæ, —Mecca Balsam ;—Tar Water ;—inhaling resinous fumes ;—Cinchona ;—Emetics ;—Sulphur, —Sulphuretum Potassæ, &c.

440. Means proper for checking colliquative sweats and diarrhœa ;—for correcting the fœtor of the expectoration, &c.

441. Remarks—On the choice of climate and situation ;—On various modes of exercise ;—riding on horse-back ?—easy carriage ;—sailing ;—swinging ;—rotatory machine ;—On the most proper cloathing ;—regulation of sleep ;—amusements, &c.

OF THE EXANTHEMATA,

OR FEVERS WITH CHARACTERISTIC ERUPTION.

General observations on eruptive Febrile Diseases.

OF MEASLES.

442. *SYNONYMA*,—*Morbilli*; *Rubeola*.

443. *CHARACTER*;—A contagious disease, occurring but once during life,—ushered in by sneezing,—swelling, redness, and watering of the eyes,—flushed and turgid countenance,—drowsiness,—and frequent hoarse dry cough,—accompanied with fever, that is, throughout, of the synocha kind (175-6) :—on the fourth or fifth day, the skin—more especially of the face, neck, breast, and trunk, appears thickly beset with small red spots, scarcely elevated, running into clusters, and at the end of three days, going off in small branny scales,—often leaving behind a troublesome diarrhœa,—or considerable pneumonic affection, cough, and symptomatic fever.

444. *PREDISPOSING CAUSES*,—a susceptibility to

339. When there is an accumulation in the Bron-
chial cells, Iuncties with give considerable relief.
Read has given them in the Catarrh of the Throat
with advantage, also occasionally in the
chronic & Tubercular Ph. the Sulph of Lime & Pica-
nassa will be the best Iuncties.

440. The best medicine for checking the coll. sweats is the
Diluted Sulph. Acid, where there is no tendency to Diarrhoea,
it may be given in the Infus Rose, or with some mild Lonic.
if you are aware that times they come on, you may prevent
them by waking the Patient just before and giving him
some mild Lonic or some Pater.
The Antiseptics most commonly used for the Diarrhoea are
the preparations with Opium, where there is no tendency
and it is depending on irritation of the intestines & a dose
of Calomel & Opium should be given. Sweet Milk is also given.
In correcting the Pater - The Carbonic Acid gas has been given
in the form of the Selzger or Soda Water; The resorcinous Bismuths have
been inhaled. a Syringe with Syrup has been used. -
When an Abscess of the Liver ulcerates into the lungs the Pater will
be very difficult to correct.
If it is accompanied with enlargement of the hepatic system
the Diluted Nitric Acid should be exhibited.
Dr. Home states that inhaling the Carbonic Acid gas has been
successful in correcting the Pater, he also mentions that when
the Patient has a troublesome Diarrhoea that the Starch
Bismuth will be useful.

443 The Patient sometimes complains of nausea
& sickness which will distinguish it from common cold.

443. When it appears as an Epidemic the Fever is accompa-
nied with Prostration of strength and assumes the Typhoid form.

The Fever is not mitigated on the disappearance of
the eruption, as in Small Pox, but on the contrary gene-
rally aggravated.

§39. In the Catarrhal form when the Patient is
sinking under the chronic expectoration, the Bath
will be a remedy essentially useful; and it may be
given in the Catarrhal form in conjunction with
the Saline Dr. but in the Tubercular Ph. it never
operates as it produces stricture across the Chest &
Dyspnea. When we find Ph. connected with Inflammation
derangement or disorder of the Bowels Menstruation
will be proper, also when connected with a Syphilitic
tendency but it must be exhibited with caution.

Let the worst air ^{for} the Patient is that in which it commences
the Climate best suited for Persons in this Disease is that in
which there is the least range of Thermometer. such as Malta
Penzance, and Hastings.
Sydenham strongly recommended riding on horseback, this
is forbid by later Physicians. Swimming will be found to
open the Pulse and is extremely useful where the Patient
cannot go to the Sea. Sea Voyaging sailing or even a Voyage.
Patients ought not to ~~be~~ ^{be} in Bed. If labour is
combined with exercise it will be productive of much
greater advantage.
and that the Patient should take as long journeys as
possible. But that horse exercise may be useful in the
Catarrhal form of Phthisis, when the Bowels are
disordered; but riding in an open carriage is the
exercise best suited to Phthisical Patients.

It has been recommended by Mr. Hay Junr. to expose
the Chest with vinegar & water, as he found great
benefit arise from it in himself but a Brother of
Dr. tried it without deriving much advantage.
but when there is any redness of the vessels about
the Chest Dr. Hunter says he is advantageous, he also
considers the shower & cold Bath useful.



446. From Catarrh by the eruption appearing on the fourth
day, and in general more sneezing & discharges.
From Scarlatina by the eruption being less florid, and being
raised above the skin and red appearing so soon, the flush
on the cheeks is deeper, in Scarl. there is swelling & redness
of the fauces; in Rubella the fever is Synochus, in Scarlatina
it is Synochus.

447. From the period at which the eruption makes its ap-
pearance, for it has been observed that when it is late
in its appearance, the Disease has generally been severe.

448. A. It has been asked whether it may not be done
by the cold effusions, but it is unavailing, we must be
very cautious in rising from the great tendency to
Pulmonic Affection. B. It may be given in the
first 2. or 3. days as a cooling Diuretic.
C. But the best prevention is keeping the Bowels regu-
larly open and the Patient moderately warm.
D. Frequently there is an alternate determination to
the Bowels & Throat.
E. If the cough remains troublesome, and the Pulse
is hard & strong, B. will be necessary in Robust
Subjects, if all Digitalis, if accompanied with hardness
of the Pulse then Opium will be proper.
F. Phtisis is sometimes connected with Pleasies and
in Scroph. Habits the insertion of an Issue will be useful
in guarding against the Disease.

the specific contagion, almost universal under puberty, but gradually diminishing afterwards; and perhaps always greatest in sanguineous, irritable, and plethoric habits.—Spring and Summer season.

445. **ESSENTIAL EXCITING CAUSE**;—the application of the specific Contagion, most probably in the state of vapour.

446. **DIAGNOSIS**.—Distinguished from Catarrh by the eruption;—from Scarlatina by the character of the efflorescence,—the state of the fauces,—the prevailing epidemic,—or tracing the contagion,—the form of the fever, &c.

447. **PROGNOSIS**,—To be drawn from—the general event of the disease;—the violence of the febrile state;—but, especially, from the degree of the pneumonic symptoms,—with the previous delicacy of the patient, and tendency to pulmonary complaints.

448. Account of the attempts to produce a milder disease by inoculation.

449. **THE TREATMENT** of Measles must be regulated by—the inflammatory form of the disease,—its specific nature as to duration,—and the particular urgent symptoms which arise in certain stages of it.—The chief indications are—A. To moderate the violence of the general febrile state;—by Venesection?—gentle laxatives;—moderately cool air;—vegetable diet;—cooling sub-acid diluents:—B. To prevent or check any unusual determination to the lungs, intestines, or brain, in the progress of the disease,—by general blood-letting;—leeches to the chest, abdomen, or head;—blisters to the same parts;—mild antimonial diaphoretics:—C. To guard against the bad consequences which often result from Measles,—By Opiates;—Digitalis;—

Perpetual blisters, issues, or setons ;—mild atmosphere,
—Ass's milk, &c.

450. Question concerning the propriety of *early general* bloodletting,—Remarks on the hazard of treating the diarrhoea by astringents and opiates ;—and a different mode, founded on the nature of the disease, pointed out. Bad consequences resulting from the sudden or long continued application of cold ;—and means of removing them.

451. Account of the typhoid or putrid type which Measles have been sometimes observed to assume ;—and the treatment proper under such circumstances.

OF SMALL POX.

452. SYN. *Variola* of authors.—Fr. *La petite Verole*.

453. CHARACTER. A highly contagious eruptive fever,—occurring but once during life ;—commencing with languor,—drowsiness,—pyrexia,—pain of the head and loins ;—vomiting,—and soreness of the stomach on pressure :—on the *third* day generally, there appear, first on the face, and successively on the inferior parts until the *fifth*—small red spots, gradually rising into pimples, which fill with *puriform* matter, afterwards dry into hard scabs, and, on falling off, frequently leave pits or marks in the skin.

454. Division of Small Pox into the *tonic* and *atonic* forms, or into—A. the *Distinct*—having few, detached, circular, and turgid pustules, with rose-coloured bases, accompanied by fever of the synocha type, abating considerably on the eruption taking place, and going off almost entirely on its completion :——And into—B. the *Confluent*—shewn by—more violent and typhoid py-

150. I do not find it is always necessary, but in full and plethoric habits, we must have recourse to it.

When the Drachma is not very frequent we may consider it as Nature's mode of curing soft the Complaint. When it continues for long time and produces great debility of strength, Antients to Hospitals will be necessary, and when they do not succeed it is generally connected with insipient Mercurial Disease. Dr. Jenner says when it continued twelve months after Measles, and he removed it by giving the Pulv. Tenuis Conf. with small doses of Mercury and keeping up the strength by its Tonics, and a mild generous Diet. When it attacks with Diseases of the Chest taking away a small quantity of blood will be found necessary.

When Metastasis has taken place to cure man from the system use of Cold, the warm Bath. C. S. Lewis in his observations.

A good adjuvant is the occasional use of the warm Bath. When Delirium takes place we must apply leeches to the temples & the head, & give Purgatives & Diaphoretics.

153 Vomiting only occurs in Adults as a primary symptom.

The spots are usually surrounded by an areola, and they generally appear white before they suppurate which commonly on the right eye.

In Adults it commences with profuse sweats; in Children very frequently with Convulsions. There is generally swelling of the face which increases until the 11th day but then subsides & attacks the hands & feet.

54. In the distinct form, the violent pain in the joints will distinguish it from common attacks of even -

450. When Measles occur as an Epidemic, the fever generally assumes the Lymphoid type, when it soon to be quiescent. But in full & Plethoric Habits, where there is any Pneumonic affection accompanied with tightness across the Chest & Dyspnoea, then it will be highly beneficial. When the Disease assumes the putrid character, Anusmonia, Cyanophontia, &c. it will be preferable to the Bath, accompanied with Blister & local B. to relieve topical congestions.

451. When the Disease has assumed the erythroid form Dr. Parr has given Cinchona to great extent with perfect success. but Dr. B. prefers giving wine, Stimulating Diaphoretics & Aguecure Dr. B.



454. The eruption frequently appears on the second Day in the confluent form; the Pustules are irregular at their Bases, first flattened and afterwards hollow in their middle; they are also brownish red of being yellow; the secondary fever comes on the eleventh Day. Ptyalism must be considered as an unfavourable symptom, sometimes Petechia & Haemorrhage occur towards the termination. On the eleventh Day the symptoms become more aggravated, & it is from this time to the 14th Day that the Patients are generally carried off.

455 The variol. cyst. is the form which usually occurs at the second attack or that which follows vaccination; the Pustules do not mature on the eighth Day, but fall off in scales.

456 Sometimes convulsion fits which generally subside when the eruption appears. Epileptic fits sometimes occur in Adults which must be considered dangerous. The symptoms lighten when the Pustules vesiculate. The Pupils sometimes appear like a shining inflated Bladder.

At this period the Diarrhoea is urgent it frequently carries off the Patient; ^{in the confl. form} sometimes a complete attack of Fever occurs, if there is much Dyspnoea, it is a sign that the Lungs are affected. The Bowels should be kept open at this time.

rexia,—generally with coma and delirium ;—followed by an earlier eruption (often with erysipelatosé appearance) of numerous, small, flaccid pustules,—running together, and containing a thin serous fluid, or brownish ichor ;—the fever abating but little on the commencement, and often increasing considerably on the termination of the eruption ;—and attended with more severe ptyalism and affection of the fauces,—or instead of them, in infants, with diarrhœa.

455. Other denominations of—*mild and benign*,—or *putrid and malignant*,—accordingly as the symptoms are moderate,—or as they are attended with hæmorrhage,—petechiæ,—bloody urine,—and other marks of a highly *atonic and septic* state.—Occasional varieties—e. gr. crystalline pock. (*Variola crystallina*, Mead and Sauvages.)—wartlike (*V. verrucosa*, M. and S.)—bloody (*V. sanguinea*, Mead.), &c.

456. Circumstances occurring at certain stages or periods of the disease, e. g. —in adults, tendency to sweating during the primary fever, especially at the time of eruption ;—in infants, epileptic fits about the same period ;—*Fifth day*, pustules begin to vesicate.—On the *eighth*, if eruption numerous,—swelling of the face, closing of the eyes, inflammation of the fauces, and discharge of viscid saliva.—*Eleventh day*—pustules at their height ;—swelling of the face, affection of the fauces, and ptyalism subside,—and are followed by tumefaction of the hands and feet, which goes off as the pustules mature.—Secondary fever—coming on when suppurative process completed.

457. PREDISPOSING CAUSES ;—A *seminium*, or susceptibility of being affected by the specific Exciting Cause, (458) which very few are entirely without,—and

though varying greatly in individuals, yet most considerable in early life, and probably increased by whatever excites inflammatory diathesis, as—full living,—particular epidemic constitution of the air,—certain seasons, &c.

458. **EXCITING CAUSE**,—The peculiar and specific virus multiplied during the disease, and applied to a susceptible person, either in a palpable form, or in a state of vapour :—proofs of this.

459. **Advantages of inoculated over casual Small Pox**.—Causes assigned for this,—choice of patient's age, and state of health ;—season of the year ;—preparation ;—early management of the disease ;—quality of the matter used ?—quantity introduced ?—Remarks on each of these heads ;—with precautions necessary to the success of the operation, and security of the patient.

460. **Phenomena of the disease explained on the commonly received humoral pathology**.—Objections to this pointed out ;—and a different explanation offered.

461. **DIAGNOSIS**.—Difficulty sometimes of distinguishing Small Pox from other febrile diseases, in the early stage of the disease ;—circumstances requiring attention for this purpose, e. gr. prevailing epidemic,—ascertained exposure,—probable communication, &c.—Occasional concurrence of Small Pox and Measles : consequences of this.—Marks whereby to distinguish Small Pox from Chicken Pox (467-8).

462. **PROGNOSIS**.—The disease generally most severe in adults,—in plethoric, irritable persons,—and in scrophulous habits :—probable causes of this.—The danger usually in proportion to—the quantity of eruption,—its confluence,—and, to the degree and kind of pyrexia which attends (B. 454).—Symptoms that forebode

459 When appearing early in winter it is generally
spreads a severe form.

459 Towards the latter part of the Spring is the season
in which it appears to be the most mild.
Paying attention to the Bowells, and keeping the Children
from diet, will generally ensure a mild form of this
disease.

461. It will be distinguished from Measles by the
catarrhal symptoms being wanting which usually
occur in this last disease, and in catarrhs there
is an affection of the Throat occurring at the com-
mencement whereas in Small Pox it does not come
until the eighth day.

The severe form in the Head & small of the back will
generally distinguish Small Pox from the other Exan-
themata.

If Small Pox & Measles occur together, we generally
find that the latter will overtake the former during
its course, and afterwards the former will make
its appearance & go through its course.

462 The Disease will generally be violent if there
much eruption about the Face

163. A Solution of Tartarized Antimony is the best
Punctio we can give - Mr Sutton used Dose in a
combination of Calomel & Tartarized Antimony as
being the preferable mode of exhibiting Antimony in
the strong Syphilis Habit, when there is much Fever
and Heat of Skin, it will be relieved by the cold Affusion

164. When eruptions occur after the Disruption of
Pain, if in a Syphilitic Habit must bleed locally
the eruption does not appear from Stimulating Dose
They look unhealthy give small doses of Calomel
& attend to the Bowels - When they flatten give
stimulants - When there is a great accumulation
in the throat give a full dose of Opium until he sleeps, but if
there is any eruption about the Head we must first
bleed locally and afterwards apply Cold - When the secondary
eruption takes place if the Bowels are not open we must
urge - Sydenham recommended small doses of Calomel
his favourite remedy Paracelsus - when it appears
in the form of Boils but it is seldom if ever safe to bleed
in this period, we must generally rely on Purging & Bleeding
the latter is casual and depends on the Syphilitic
we must order injections, and give Anodyne

462. From blurring affection of the eyes, sometimes total blindness.

462. Opthiasis, Tubercles, Pustules, Glandular Enlargements, or eruptions on the skin are often the result of this Disease -

463. A. Where the Liver denotes an active Inflammation, or in a robust & plethoric constitution, &c. will be necessary, but it must not be carried to any great extent, as it may cause Dropsy. The combination of Calomel & Santal Midy is the best Purgative we can employ.

B. Stimulating Draught will be preferable to Cathartics previous to the maturation of the Pustules.

C. prefers Wine to Liniments - when there is any softening tendency the mineral acids, in the form of Rhus. & Rosae if there is no Diarrhoea; when the eruption is more violent than in most cases, Conf. Opii will be proper. Carbonic Acid taken into the Stomach in the brisk form of Legros proves a powerful Stimulant - as an Emetic we may give equal parts of Antimony & Opium Wine, & as a Purgative Calomel with Rhubarb & Colloidal. When the Disease assumes the putrid form, we must give the most stimulating remedies as Camphor, Aether Sassafras &c. also Wine as Food of the Diet which should be of a generous nature.

When there is an unhealthy state of Bowels accompanied with Haemorrhage, the Acid Sulph. Sol. in the Rhus. Rosae & the guarded with Opium will be the best remedy & of the greatest advantage derived from it.

464. When connected with Inflammation of the Throat, Blisters will be proper. When the secondary process is ushered in by rigors this is considered by Authors as dangerous. If it appears accompanied with Diarrhoea which relieves the other symptoms, but if it be violent we must moderate it, by giving first a little Calomel followed by Astringents & Aromatics, & if much prostration of strength by Stimulants &c.

a confluent eruption.—General bad signs ;—fever continuing high after eruption complete, especially with delirium, coma, &c.—pustules ceasing to fill, or flattening ;—their having a pale or livid disc ;—intermediate erysipelas, or petechiæ :—sudden subsiding of the ptyalism and swelling of the face, without consequent tumefaction of the hands and feet ;—hæmorrhage from the nose, intestines, &c.—Danger from subsequent complaints.

463. THE TREATMENT OF SMALL POX necessarily very different, not only from the general *tonic* or *atonic* form it assumes,—but from the changes that take place in the successive stages of—primary fever,—eruption,—maturation,—and secondary fever ;—and the urgency of particular symptoms in individual cases.—The general indications, however, are—A. In the *tonic* form, to moderate the violence of inflammatory state by—Venesection ;—purging ;—vomiting :—antimonials ;—application of cold air,—cold affusion ;—vegetable diet ;—cooling subacid drink ;—Nitre ? &c.—B. In the *atonic* form, to remove irritation from the *primæ viæ* by gently emptying the stomach and intestines ;—and afterwards to support the *power* of the system, and prevent or correct the septic tendency,—by the use of Cinchona, Angustura, &c.—vegetable and mineral acids ;—Wine ;—Camphor ;—Opiates ;—warm diaphoretics ;—fomentations ;—blisters ;—brisk fermenting liquors ;—Carbonic Acid glysters ; &c. &c.

464. Management necessary under urgent symptoms—e. gr. when convulsions occur ;—when the eruption does not appear ;—when the pustules flatten ;—when the affection of the throat, and the difficulty of swallowing and breathing are very great ;—when the patient is sleep-

less, or troubled with cough;—when the secondary fever takes place.

465. Of the means recommended for preserving the eyes from injury, and lessening or preventing the deformity of pits, seams, &c.

466. Diet and regimen proper after violent Small Pox, to guard against the consequences that often follow.

OF THE CHICKEN POX.

467. **SYNONYMA.**—*Varicella*, Cull.—*Variolæ Pusillæ*, Heberden:—bastard, Chicken, or Swine Pox.

468. **CHARACTER**;—A specifically contagious eruptive disease, occurring but once during life, and communicable by inoculation:—febricula of the synocha kind, followed by few and scattered pustules like Small Pox, which vesicate at top, then dry into crusts without suppurating, and rarely leave any marks behind.

469. This disease so slight in general, as not to require medical treatment; and only demanding particular attention from its resemblance to Small Pox, whereby it has often misled into a false security, from the belief of a person having had that disorder in a mild form, either casually, or by inoculation.

OF THE VACCIOLA, OR COW-POCK.

470. **SYN.** *Cow-pock*, Gloucestershire;—*Pap-pock*, Norfolk;—*Shinagh*, Ireland:—*Kine-pock*, America;—*Vaccine disease*:—*Vacciola*.

471. **CHARACTER**;—A specific, febrile (?) disease, —occurring but once during life,—communicable with

465 It has been recommended to wash the eyes with cold water, or with milk & water. Dr. thinks a light Breid & water Poultice preferable, and if there ^{is} inflammation of the eye to be laid locally -
To prevent the Pits remaining after the eruption, it will be best to open the Pustules early; some apply Punkt: have the parts washed with milk & water with this view, or moistened with oil -
But when they form in the Cornea there is generally a slight obstruction to vision.

468 Dr. Hudson states that the Pustules seldom exceed 100. They appear earlier than those of Small Pox.

469 In History of a full Habit it will be necessary to exhibit a Purgative -

466. *Glabropharyngis*, with richness of the Pulse.
Particularly in Adults, it will be right to take away a
small quantity of Blood.

When there is any tendency to *Phthisis* or *Glandular*
enlargement, the insertion of an *Issue* will be the best
preservative.



471. Sometimes when the Disease arrives at its height, there are slight febrile symptoms, loss of appetite &c. - On the 4th Day the Pustule is four lines in diameter, on the 8th surrounded by a red areola, on the 10th flat, sometimes it rises in the middle, on the 12 begins to grow dark. Declines, and on the 20th entirely disappears leaving a permanent cicatrix.

472 Dr is of opinion that this is a disease originating from the animal from whence it takes its name, but from the press of Ross's heels.

473. It has been found that out of 3200 who were inoculated for this Disease only 1 died - Small Pox is much more liable to bring on other Diseases than the Cow Pox. If a Patient be vaccinated when the S.P. is already in the constitution, it will overcome the latter Dist if it be early enough, if not it will mitigate it considerably. It very rarely happens that any eruption takes place at any other part besides that which received the matter - two cases however ever occurred when it was otherwise.

473. The imperfect Pustule will be a considerable help, it arrives at ^{maturation in 6 or 8 Days.} its course quicker, the efflorescence is not circumscribed but appears as a general efflow. whether it is so vivid as in the true ^{disappears in 2 Days.} pus hives, it is also raised at its base, its contents were not clear but opaque.

Mr Paves test of constitutional affection is to inoculate the Patient a second time on the sixth Day, and if the true Disease exists, the Pustule from the second inoculation will arrive at maturity as soon as the other. Mr Pearson says that if you vaccinate on the 7th Day that the pustule will die away after the efflorescence takes place.

certainly only by inoculation with the peculiar *lymph*, which produces a single, flattish, circular, spongy pustule, of a pale bluish-white colour,—gradually spreading for some days, and becoming surrounded with a red areola;—the centre first, and progressively the whole pustule, changing to a dark coloured hard eschar; that dries into a *concave* shining scab, and on falling off leaves a slight mark upon the skin.

472. Historical account of the disease;—and Dr. Jenner's claim to the invaluable discovery of its being *A certain, easy, and universally practicable preventative of Small Pox*, vindicated.—Question respecting the original source of Vacciola, being *equine* or *vaccine*, discussed;—and the improbability of the former opinion shewn, both from analogy, and the result of numerous experiments.

473. Comparison of Small Pox with Vacciola, in the severity of the two diseases,—and the consequences resulting from them, as introducing new or bringing forth latent disorders.—Comparative rapidity of progress in the action of variolous and vacciolous virus; and practical deduction from thence.—Possibility of accidental commixture in the infection, or casual concurrence of the two diseases, illustrated by cases; and explaining the discordant opinions at first entertained respecting the phenomena proper to Vacciola.—Remarks on the *Spurious Pustule*,—its character,—the mode in which it is produced,—and the mischief which may eventually ensue from it.—Source of the doubts as to the future security against Small Pox by vaccination; and circumstances which, if duly adverted to, will tend to resolve this difficulty.—Proposed test of constitutional affection.

474. Cautions necessary to ensure the success of ino-

culatation, with respect to—the date and condition of the pustule from which the matter is taken,—the mode of preserving the infection,—the state of the patient's health,—the method of inserting the matter, &c.

475. Account of the appearances which the inoculated part occasionally assumes,—the alarm which these at first created, and the active steps taken in consequence;—together with the simple treatment alone required for their removal.

OF ERYSIPELAS.

476. SYN. *Ερύθημα*, Hipp.—*Ignis sacer*;—*St. Anthony's Fire*;—*the Rose*;—*Shingles*.

477. CHARACTER:—A shining redness of the skin, of a florid, yellowish, or crimson hue,—becoming white on pressure, but returning immediately after;—attended with burning pain;—extending or changing place irregularly, and often occupying a large surface;—commonly going into numerous watery pimples or vesicles, which oftenest terminate in resolution and meally desquamation, occasionally in suppuration, and not unfrequently in gangrene. The attack is usually preceded, accompanied, or followed, by Synochus pyrexia, and this commonly attended with drowsiness, and frequently with stupor, and low delirium. (*Typhomania*.)

478. Erysipelas differently denominated by authors, as affecting particular parts, e. gr. the face and head, *Sideratio*,—the trunk of the body, *Ζώνη*, *Zona*, *Shingles*;—the extremities, *Rosa*, (SENNERT).—It occasionally extends to, or attacks, the brain, fauces, œsophagus, or intestines,—producing symptoms of phrenitis, coma, &c.—or of angina (*A. erysipelacea*),—of gas-

476. The Matter should not be taken after the tenth or eleventh Day, neither should it be diluted. Heat also destroys its properties, and the lancet on which it is taken should be perfectly clean; care must be taken not to break the Puscle when it appears. The Disease will not take place if there is any other existing in the system, in inserting the matter care shld be taken not to produce Blood.

477 Sometimes it will occupy only one half of the Face, a regular line extending down through it.

When suppuration takes place, the Puscle formed is seldom healthy. Sometimes it continues for 7-14 or 21 Days. But generally, if irregular in its termination, it usually lasts 8 or 10 days.

478. The Delirium which occurs is considered by Cullen as an extension of the Disease and not a metastasis.

Goulard wash or cold water on

1175 When the inflammation is considerable a poultice may be applied, and a Purgative administered.

If the Scabs should remain longer than usual and become painful, applying a small quantity of Lemon Ointment will generally be sufficient, to produce a separation of the Scabs.

An instance has occurred where the Axillary Gland, inflamed & suppurated.

487. Phleg. Inflam. is more red, permanent and circumscribed, it is painful to the touch and it is deeper seated; while in Erysipelas the redness disappears on pressure and it is so deeper and the pain in the first is throbbing, but in the other burning; the Inflam.ⁿ occupies the cellular tissue in Phlegmon, while in Erysip. it is more superficial. It is also more prone to metastases than the Phleg. Inflam.ⁿ

tritis (*G. erythematica*—) or of Enteritis (*E. erythematica*—).

479. Distinguished also as being—A. acute, or—B. chronic ;—C. superficial and spreading (*Erys. phlyctenodes*, Cul.), or—D. more deep seated and fixed (*E. phlegmonodes*, Cul.—*Anthrax?*) ;—as—E. primary, or—F. symptomatic ;—as G. merely topical, or—H. attended with its peculiar fever, (*Febris erysipelatosæ*,—Sydenh.) or—I. supervening upon fever of any other kind.

480. Account of an Epidemic Erysipelas attacking the abdomen of new-born children.

481. ESSENTIAL CHARACTER OF ERYSIPELA-TOUS INFLAMMATION, contrasted with that of the simply Phlegmonous, in—its appearance,—the parts it attacks,—its migratory progress,—metastatic tendency,—and most frequent terminations.—Occasional mixture of the two (C.—D. 479) ;—and important distinction of Erysipelas, as partaking *more or less* of the *atonic* form, and as being attended by, or free from, a corresponding pyrexia.

482. Humoral pathology of the disease discussed ; and inquiry how far the inflammation may arise from a combination of certain principles, analagous to the process of combustion.

483. PREDISPOSING CAUSES ; — Peculiarity of constitution or habit,—depending chiefly, perhaps, on certain original structure or acquired condition of skin ;—but often evidently associated with irritability both of body and mind,—with gross habit,—indolence,—and full living,—advanced age,—and habitual excess in spiritous liquors ; with particular state of the hepatic function :—

Autumnal and Summer season.—Hydropic diathesis.—
 Preceding attacks of the same disease.

484. EXCITING CAUSES.—Insolation, or exposure to the scorching rays of the sun, especially under violent exercise;—occasional excess in spiritous or acescent fermented liquors;—certain articles of food and drink particularly affecting individuals:—Mercurial irritation;—various acrid applications, e. gr. Cantharides, Mustard, Ammonia, Euphorbium, &c.—stings or bites of venomous insects;—puncture of leech in some persons;—burns, and scalds;—contused or lacerated wounds, especially in tendinous, ligamentous, and membranous parts;—fits of anger?—sudden refrigeration when overheated;—stopping customary discharges from issues, &c. or repressing chronic eruptions:—Epidemic influence of atmosphere:—peculiar contagion?—Remarks on these.

485. DIAGNOSIS.—Circumstances distinguishing Erysipelas from other cutaneous inflammations.

486. PROGNOSIS.—To be drawn from a collective view of the patient's age, previous health, and mode of living, &c.—the nature and degree of the exciting cause;—the part affected;—the disease being merely topical, or—accompanied with inflammatory or typhoid fever, delirium, coma, &c.—its tendency to metastasis,—and its common disposition to gangrene.

487. TREATMENT necessarily varies in several respects according to the circumstances of the case; but chiefly turns upon the *more* or *less* atonic type of the disease, both locally and generally. The principal indications then are

A. *To lessen Inflammatory Action*, whether local or universal, by the antiphlogistic plan, carried as far as the

L 84. This Disease is most frequently Epidemic
when the weather is close and damp.
D. Willan has communicated the Disease by Inoculation.

L 85 The evanescence of the Inflammation, and its
spreading to the surrounding parts, together with the
appearance of vesicles on the second day will sufficiently
distinguish it.

Erysipelas is generally attended with febrile symptoms,
and the skin at first is perfectly smooth. In some of the
Erysipelatous we have swelling of the face in the beginning
triduous, but it comes on suddenly and is general, the
skin is usually rough owing to a Papillary eruption.

486. When it occurs late in life in debilitated constitutions, it is very liable to termination in gangrene. When it is produced by mercury, it is generally very severe also when it attacks the various parts.

A. Icterus will be extremely useful in the commencement & generally a large quantity of Bile is brought up; & usually or is there. When there is much sickness & discharge of green Bile from the Intestines, small doses of Calomel with Opium & Chalk will be very beneficial. When there is much sickness & the stability of the Stomach the application of a Blister over the Liver will generally relieve it.

The Camphorated Spirit of Wine will be a useful Application. When there is any tendency to Gas or the Stomach. But. D. will be found to have less effect. Those notions which contain Opium in the A. A. should be serviceable before the vesicles burst, even the Application of Cold Water will be advantageous. In the & demerolous form & that which is likely to run into a state of gangrene, the use of the dry cup is also very gratifying.

Dr. Hirsch's inflammation around the vesicles, which does not leave until ^{some} ~~the~~ days after the fever, there is generally a succession of them, sometimes beginning several weeks after the onset of the fever, but they sometimes appear on the face. I have frequently observed the eruption to be attended with great anxiety of mind.

Vesicles appear in one or more in various parts of the body. - Dr. Doan's thinks this a contagious disease. He has never found it so. Authors who have written this disease recommend supporting the system with alternative doses of Mercury, also the Decoction of Wood,

A. In young Persons of Pithy Constitution and in the country it is often necessary to employ the lancet, the quantity taken away must be such as to keep it equal to the power which is to circulate it.

Leeches are sometimes requisite when there is congestion in any organ, also Cupping glasses - The saline Purgatives will be proper during the Inflamed stage, but when it becomes the catarrhic form Calomel will be preferable. If the Inflamed symptoms continue the Antimonial Diaph. may be given, but in old Persons this has a common effect.

B. When there is great determination to the Head and Typhomania comes on early, a Blister should be applied to the nape of the neck. When there is no congestion in the Brain active Salaries or small doses of Opium will be useful. To allay Irritation on the Stomach, the effervescent Diet may be given with Opium.

C. When the Rubef. application will be water with a small quantity of Vinegar.

When the vesicles break to prevent the Discharge coming out of the skin Pipe clay or Oxow Root may be sprinkled on the part.

488. When the Disease occurs in Large Towns and Hospitals it is generally Epidemic and assumes the dysenteric type - as in the former it is commonly in the active form. The operation Disease commonly assumes the active character.

violence of the symptoms, and the strength of the patient may require, and as the acknowledged atonic character of the disease in general will safely admit;—by Venesection?—leeches;—purging;—what cathartics most proper;—by Nitre?—cooling diluents;—mild diaphoretics.

B. *To support Power*, and thereby to prevent any rapid sinking or sudden metastasis from taking place, and to obviate their effects when they have occurred;—by Cinchona or other tonic bitters, either alone or joined with acids or alkalies;—by wine;—by the occasional use of certain purgatives;—by blisters,—stimulant fomentations,—warm diaphoretics, e. gr. *Ammonia*, *Serpentaria*, *Confect. Opii*, &c. — Cautions respecting Opiates under certain circumstances.

C. *To diminish local Irritation* by applications to the inflamed part.—Remarks on the different and dissimilar articles recommended for this purpose; and on the circumstances to which they may be respectively adapted:—*Liq. Plumbi Acetatis dilut.*—*Spt. Vini*;—simple water;—*Aq. Mephitica alcalina?*—*Liniment. Calcis*;—Why oily or greasy applications in general aggravate the inflammation:—Simple dry warmth:—Pipe clay:—Starch, &c.

488. Remarks on the different treatment necessary according to the age,—constitution,—and habit of the patient;—as occurring in country places, or in large manufacturing towns;—in different seasons;—and as being sporadic,—or epidemic.

489. Is PEMPHIGUS allied to Erysipelas?—Circumstances in which they agree;—others in which they differ.—General conclusion; with some particulars respecting Pemphigus not noticed by writers.

SCARLATINA ANGINOSA,
OR SCARLET FEVER, WITH SORE THROAT.

490. GENERAL CHARACTER.—A specifically contagious, and generally epidemic disease, occurring but once during life;—commonly attacking between ab lactation and puberty;—beginning with sudden prostration of strength, lassitude, and frequent chills, followed by continued, intense, and pungent heat of skin,—very quick small pulse,—sometimes vomiting,—generally head ach,—great restlessness, anxiety, and tendency to, or actual delirium;—the eyes are humid and red,—the countenance flushed, and face swelled, especially about the nostrils, lips, and lower jaw,—with painful stiffness and fulness extending round the throat and neck:—the breath is unusually hot;—the respiration frequent, often difficult;—the voice guttural, and deglutition painful:—the internal fauces on examination appear very red, tumefied, and covered with whitish or ash-coloured sloughs, which occasionally degenerate into deep gangrenous ulcers, with discharge of fetid and corrosive ichor or sanies from the nose and mouth, accompanied with enlargement and frequent suppuration of the parotid and submaxillary glands,—otorrhœa, and temporary, or permanent deafness. Between the second and fourth day inclusively, the skin becomes more or less uniformly covered with a bright scarlet efflorescence, scarcely eminent,—changing after a few days to a dusky brown colour, with subsequent desquamation of the cuticle.—The patient, when convalescent, often suddenly attacked with dropsical swellings.

491. Variations in the state of the skin, tongue, urine, and bowels, in the different stages or forms of the

450. There is no intolerance of light, which will distinguish it from Rubella.

451. When Dacry occurs it is generally about ten days after the eruption.

452. In the mild form of the Disease the Tongue is usually covered with a white fur then which the Papillae protrude. In the malignant form it is coated with a dark yellow. Next the Papillae also protruding this being a diagnostic symptom of this Disease. When it is covered in by Dacry it usually terminates fatally in a few days. When it attacks the Throat & Trachea it is also frequently fatal.

491. In the mild form the effluescence is very slight, under other circumstances it is considerable. Dark coloured, sometimes appearing in large blotches, occasionally intermixed with a papillary eruption, or with an eruption resembling the latter.

The symptoms are not influenced by the violence of the eruption. The urine in the mild form scarcely altered but in the severe cases at first highly watery, but soon becoming deep or fawn colour, in some cases sometimes has blood mixed with it. Towards the conclusion it throws down a thick sediment. The bowels are more uniform than in other diseases, sometimes in the worst form there is a troublesome diarrhoea which is a very unfavourable symptom.

eggs in the confluent form of Muscles there are a number
of papillae in elyotens, which are raised above the skin,
whereas in *Scalantina* they are not elevated, & are dis-
tinct. There is also an efflorescence about the *Paucis*
telum *Pud. Palati*.
In *Prasina* there are light purple spots on the *basils*
trunculi, but unaccompanied by ulceration.

493. If an efflorescence takes place on the below Periodic
Patate, without any affection of the Skin, or if this efflores-
cence appears on the Skin without fever, we do not find
that the Person is secured against a future attack of the
Disease, and the Patient is capable of communicating
the Disease to another, D. Rabyton states that he has
met with the Disease a second time in the same person.

494. In Plethoric Habits it is generally ushered in
with severe symptoms, in Scrophulous Children
we find the Throat particularly affected.
It is commonly more severe at the latter end of Au-
tumn or the beginning of Winter.

495. In Measles the Patient is first attacked with
catarrhal symptoms, as so in Scarlatina: in which the
Pulse is always small, small & weak & the symptoms are
more than of Typhus, the Cough in Measles is more severe
and attended with expectoration, in Scarl. there is stiffness
of the neck & throat, the eruption appears much sooner, about the
second day, and it is of a bright scarlet colour,
In Typhus the skin is smooth & swelled, it begins from
one point & spreads, but in Scarl. the efflorescence is in blotches.
In Typhus the spots are distinct and it is accompanied with
debility, it also begins on the arms & legs - which are oval or round.
In Scarlatina the eruption is in purple spots with ~~white~~
^{white} ~~spots~~ ^{at first} ~~spots~~ ^{in the middle}, and there is no affection of the Face.
In both the Face is covered with ^{white} streaks which are irregular
& not surrounded by inflammation, the Tongue is also affected and there
is not so much fever or heat of the Skin.

disease.—Particular symptoms occasionally taking place in individuals, from idiosyncrasy, or accidental co-operation of other morbid causes ;—and unnecessary multiplication of species thence made by authors.

492. Historical sketch of the disease as described by eminent writers, from an early period to the present time ; with its variations at different times, and the probable causes of these ;—tending to reconcile the dissimilar accounts given of it, particularly by Sydenham and Morton, and determine the identity of *Scarlatina simplex*, *Scarlatina anginosa*, and *Angina maligna*.

493. Question of its specifically contagious nature, and its occurrence but once during life discussed ;—with the sentiments of Drs. Clarke, Withering, Currie, &c. upon these points ; and importance of this question in respect to the hazard of individual exposure, and the measures required for general security.

494. CAUSES.—*Predisposing* ; a susceptibility to the peculiar contagion, which perhaps most adults possess in greater or less degree, but diminishing rapidly after puberty, and becoming nearly extinct in middle age.—Marks of constitution and habit which seem to dispose to aggravated degrees or particular forms of the disease.—Seasons, epidemic influences, and other extrinsic causes, giving similar tendency.—*Exciting cause* ;—the Specific Contagion generated during the febrile state of the disease. Mode in which this has been supposed to act ; and efficacy of certain means of cure deduced from thence.

495. DIAGNOSIS. Symptoms distinguishing the varieties of *Scarlatina* from Measles,—from the Purpura,—Erysipelas,—Urticaria,—Apthous Angina, &c.

496. PROGNOSIS.—To be drawn, on the one hand,

from the *violence of the febrile commotion*,—on the other, from *the degree of the Anginous affection*,—and on both, from the general *tonic or atonic* form which the disease puts on;—but this greatly assisted by a consideration of the patient's age, constitution, and habit of body;—together with the general event of the reigning epidemic,—the period of the disorder,—and the effect of the treatment already employed:—and lastly, the chance of other diseases to which it frequently gives rise.

497. TREATMENT. Account of the opposite extremes inculcated from preconceived theory, and obstinately pursued by their respective abettors; and comparison of their usual results, with that of the varied plan adapted to the nature, duration, and general tendency of the disease, and the predominant type it assumes in the individual case; illustrated by proofs, shewing the mischief of confidence in reputed specifics.

498. The leading indications are, A. To moderate the general febrile commotion with as little loss of *power* as may be, by—(a.) removing irritation from any morbid colluvies in the tract of the alimentary canal;—by Emetics,—Purgatives: remarks on the *kinds* of each most proper,—their common and individual *modus operandi*,—and the circumstances limiting or precluding their use:—(b.) abstracting any excess of heat, whether arising from pyrexia, or external temperature:—Cold affusion,—cold ablution,—particularly articles that may be employed in the latter mode: regulation of bed-clothes, and of atmospheric temperature:—(c.) restoring the cuticular transpiration by remedies acting on the stomach,—by mild diaphoretics,—tepid diluents:—(d.) diminishing the morbid irritability of the heart and artē-

496 When it occurs as an Epidemic it most unfrequently attacks Women in the Puerperal state, and it has almost invariably terminated fatally.

08. D.C. can seldom be had recourse to - but as I have
as generally been found a useful remedy, Dr. Williams
very particular to them, he used Opium & East Indian, his
plans have generally been followed, he gives two in 24 hours.
In this Disease is attended in by bilious vomiting & diarrhoea,
but can seldom be had recourse to for increase
of irritability of the stomach. Purgatives are not recommended
William & Rush, they were formerly even advised to be medicinal
but now Dr. Williams, or some other mild Purgative, Calomel
purgatives are not advisable as they will tend rather to de-
crease the strength of the Patient from the profuse discharges
of mucus, whereas they do not bring away the follicles
Dr. Williams has advised Calomel & Antimony Powder, this however
is very much disordered. Cases have occurred in this Hospital
of vomiting & Purging of green Bile, when this is the case Dr. Will-
iams has recommended Calomel & Kali Vitriolatum.
Dr. Gregory of Liverpool has recommended Cold affusion
says when used it should be early and frequently repeated
until the Heat abates. Dr. Gregory recommends
Abstinence is not so efficacious, but it may be out of the
way of Bath placed a Child in wet sheets and allowed it
remain there until the Heat was abated. Linseed may
be added to the water with which the Body is sponged and it
be found more grateful - no other

Fig 8. b. The bed clothes should be light and in summer in general a sheet will be sufficient. Cold Air should be avoided but the temperature of the Room kept at 55.

c. Diaphoretics are not very useful in the beginning, but Antidysenteric with Calomel may be given if there is no Purging - Cold Decisions will be more grateful than

Opium, & Digitalis does not appear to be proper in the early part of this Disease, but afterwards it may be of advantage. Opium should not be given unless there is frequent vomiting or a troublesome Diarrhoea.

3. In some ^{occasional} ~~Subjects~~ ^{cases} of Dysentery Calomel may be necessary, but it is seldom admissible. Scantillation is sometimes combined with an affection of the Chest & Pneumonia, and here Calomel does not appear to be attended with that advantage it is on other occasions.

a. Authors state that when the Disease is cut short by an Emetic that the Constitution is not secured against a future attack. - When there is Bilious vomiting & Purging you should give something that exerts a steady action on the Bowels the caution however ^{that} the Decisions, small doses of Calomel will be given here with advantage.

c. The most grateful Diluent that we can give is either of the Acids largely diluted, and they will be preferable to Water. - Dig. Stalis may be given when there is any disposition to Anasarca.

e. If there is any labouring under Congestion, Cupping Glysters & Leeches may be applied.

500. Fomentations, which contain Alcohol,
applied to the Stomach & Bowels, also to the lower
Extremities, will often be found useful in miti-
gating the active Delirium & urgent Symptoms.

501. Sometimes Inflammation in the Ear leads to the des-
truction of the Tympanum & Bones of the Ear.
Sometimes Children are harassed by a kind of hee-
lous while the Glands are joined to a state of
effluvia - occasionally they discharge a large
quantity of water containing flakes of adhesive
matter. When there is Pus present, or a
cess of Malum & Pythia & in the head
with Blisters to the Head & Abdomen.

499. Aloud Capsicum and Cinnamon have been
found as below joined with Bark

The mineral Acids are particularly indicated.
Dr Wilson recommends the Copper Mineralic Acid.
Dr L has always given this Mineralic Acid with
benefit; and Dr Boiss has found the Dil Sulph. Acid
in Infus. Rose equally advantageous.

Another fact that Dr Wright has found useful is com-
bination of Zij. Capsicum. Zij. Salt, ^{infused} with Boiling Water
and Zij. of Cinnamon. ^{added} stable spoonful of this is sufficient
from D. 1000. This is particularly applicable to slow
phlegmas. A gargle consisting of a Decoct of Oak Bark
& Logwood with some Alum and Dil. Sulph. Acid will be
found beneficial.

It may be used as a Gargle & taken internally

500. When there is Violent Vomiting a Blister may be
applied to the Pit of the Stomach. It may be given in the
form of Elixir. Difficult respiration is sometimes owing
to a collection of Mucus in the Trachea, more frequent. It
however to the extension of the Glapes, as in the Asth-
matic Gargles will be found here & a Blister to the
Throat. If active Delirium be the Cause of the Glapes,
but if of the Gargles a Blister and where there is no
congestion. ^{Code} Opium may be admissible. Diarrhoea is fre-
quently connected with some Disease of the Liver, & gives
considerable doses of Mercury with Chalk Mixture.

If Purpura occur we must be guided by the Pulse.
When there is Vomiting the effluvia Dr. with an excess of
alkali & a few drops of Vin. Purg. may be given. If the difficulty
of respiration is owing to the extension of Inflamm. Leeches or Lipp.
Glapes will be applied.

501. Sometimes it is followed by Rheumatism & if
it is neglected you will generally find that Anasarca
will follow. Sometimes the swelling of the Parotid &
Submaxillary glands will follow. & Suffocation, some-
times permanent Deafness will remain.
Hematuria Disease more frequently follows this
complication than Dropsy.

Read Dr Will's Account of the Urine in Scantation
in the Indian Chirney. Transact.

ries to the stimulus of the blood,—by *Digitalis*,—*Opiates*?—or (e.) if necessary, lessening the stimulus of this fluid from its quantity, and perhaps quality,—by *Venesection*,—*Leeches*, &c.

499. B. In the more atonic and advanced stages of the disease, to support the *power* of the system, and to obviate the general septic tendency, or to correct the actually septic state of parts, by—(a.) light vegetable food,—*diluted Vinous liquors*:—(b.) the more simply tonic remedies;—*Calumba*,—*Cusparia*,—*Cinchona*? &c.—(c.) articles which operate chiefly by their general or local stimulus, and prevent the *action* from falling below the degree necessary to the maintenance of *power*;—*Contrayerva*,—*Serpentaria*,—*Seneka*,—*Æther*,—*Capsicum*,—*Ammonia*, &c.—(d.) articles that are chemically antiseptic;—*Carbonic Acid Gas*,—*Infus. Rosæ*,—*Oxygenated Muriatic Acid*,—*Astringent Gargles*.

500. C. Throughout the disease, to watch and relieve particular urgent symptoms,—as vomiting, — difficult respiration and deglutition,—delirium,—diarrhœa, &c.—by *Tepid Bath* or *Fomentations*,—*Blisters*,—*Leeches*,—*Opiates*, &c.

501. D. To guard against the diseases which are frequent sequels of *Scarlatina*.—Account of these diseases,—their respective frequency,—the circumstances under which they more especially take place,—and the means suited to their prevention.

502. Remarks on the measures proposed for limiting or destroying the *Contagion*, and their ascertained effects.

Sulphuric Acid fumes on Salt & Iron pans, also in bottles have been tried in School without effect, also the continued frequent use of vapors, fumigation with vinegar and free ventilation. Still many authors of respectability state that they have used the Sulph. Acid &c. with advantage for this purpose.

OF CHOLERA.

503. Origin and meaning of the term *χολερα*.—SYN. *Cholorrhagia?* or *Gall-flux?*—*Mordechin*. E. Ind.

504. CHARACTER.—Sudden and spontaneous attack of vomiting and purging of bilious fluid,—with severe pains in the stomach and bowels,—great anxiety,—prostration of strength,—and violent cramps in the muscles of the belly, and in the calves of the legs.

505. Detail of symptoms in the order in which they usually occur;—and occasional variations in the degree and form of the disease, and in its result, from the co-operation of assignable causes: Varieties—*Ch. Spontanea*,—*Ch. ab ingestis*.—Remarks on the ancient distinction into *Ch. humida*, et *sicca*.—Cholera frequently precedes Dysentery in hot climates,—or accompanies the first paroxysms of intermitting and remitting fevers.—*Ch. Febrilis*, — *Ch. Intermittens*. — Sometimes changes to Bilious fever (Hepatitis) or Enteritis; especially under certain management.

506. Circumstances which serve to distinguish idiopathic Cholera, from the porraceous vomiting and purging caused by certain poisonous ingesta.

507. PREDISPOSING CAUSES; peculiarity of constitution, generally termed *bilious*, and often marked by irritability of stomach and intestines, and irregular excretion from the liver.—Long continued hot weather;—autumnal season;—*phytoseptic* miasma:—certain epidemic influence of atmosphere.

508. OCCASIONAL OR EXCITING CAUSES. Sudden refrigeration after excessive heat;—drinking largely of acid, or fermenting liquors;—eating cold, sour, or unripe

185 Sometimes the Disease comes on ^{suddenly} with sickness
and vomiting of Bile and soon accompanied with
an anorexia, at other times it is preceded by great pain
and distension of the Bowels owing to an accumulation
of Flatus, it is now & then attended with troublesome
nauseas. The Pulse is small, frequent and irregular
Temperature of the skin ^{is sometimes} greater than natural, during
the Paroxysm, and often of the Diaphragm
sometimes it runs its course in a few hours and proves
fatal.

Henry when at Calcutta had an attack of Cholera
and he suffered intense pain in the abdomen for
several days & nights without having any sleep, but the ad-
ministration of opium & other remedies of two ounces
of a pint of water brought away a large quantity
of bile which soon relieved him.
This Disease is seldom violent in this country as the
those that are warmer, sometimes however it termi-
nates in 24 hours. It is seldom attended with Fever,
Temperature of the skin being cooler than natural.
Pain is sometimes relieved by distending
the stomach.

506. When Poison has been taken, the Patient complains
of violent pain and heat in the Stomach & Mouth
constipation and distending pain about the Chest,
there is general swelling of the Face, also more
tumor in the ^{Hypochondria} Region Lower Cardiac
pain, but there are no Swellings of the Lower Extremi-
ties or Swellings of the Belly -

516. Sometimes the Disease proves fatal in 2 or 3 Days in Patients of a weakly constitution. If it continues 3 or 4 Days the Patient generally does well, and if it lasts a Week becomes curable.

The unfavourable symptoms are Convulsions, violent cramps of the muscles of the Body & Extremities, Shivering, extreme prostration of Strength & the Pulse becomes feeble and intermitting - on the contrary when the Discharge becomes more healthy & less in quantity, if there is a gentle Diaphoresis and the spasms are less severe, they denote a favourable termination.

fruits,—raw vegetables,—or any food difficult of digestion.—Drastic emetics or purgatives.—Passions of the mind.—Retrocession of Eruptions, Gout, &c.

509. PROXIMATE CAUSE. Sudden and excessive secretion and excretion of acrid bile, exciting violent spasms in the stomach and intestines, and profuse serous discharge from their surface.

510. THE PROGNOSIS must be drawn from the previous state of health and vigour of the patient,—the degree and kind of the symptoms present,—the duration of the disease,—the nature of the remedies (if any) already used, and their effects.—Symptoms which portend danger ;—those which augur a favourable event.—In hot climates, occasionally terminates in chronic diarrhœa, or dysenteric state.

511. TREATMENT. The indications are—1st, to evacuate the offending matter ; and 2dly, to prevent the strength being exhausted by the violence of the pain, or the profuseness of the discharge.—Circumstances under which the first may be attempted directly ; others in which the second becomes necessary to obtaining the first with safety and effect.

512. Means suited to the first indication ;—plentiful dilution with bland mucilaginous fluids : kinds of these usually employed, and choice of them under certain circumstances.—Sometimes mild laxatives : cautions respecting the *kind*, and repetition of these.

513. Means adapted to the second indication :—Opiates in quantity and frequency proportioned to the urgency of the case ;—rules for their choice and mode of administration :—warm bath ;—fomentations ;—pediluvium.—Stimulant and anodyne liniments and embrocations.—Simple bitters and aromatics.—*Infus. panis*

tosti:—ancient polenta.—Aq. meph. alcalina:—other alkaline remedies.—Haust. effervescens,—&c.—Nutritive food in small quantities.

514. Management necessary when the violence of the disease is allayed, to avoid its renewal, and prevent fever or inflammation from supervening: symptoms denoting the approach of these respectively.

515. Treatment proper during convalescence,—to prevent insidious disease from establishing itself in other shapes (510)—Probable means of avoiding future attacks of Cholera.

516. Description of the violent and destructive *Tetanic* form which this disease assumes in the East Indies; with remarks on the treatment most likely to lessen its general fatality.

OF DIARRHŒA.

517. Origin and meaning of the term.—SYNONYMA. *Alvi-fluxus*;—*Lienteria*;—*Cæliaca*;—*Enterrhœa*?—*Purging*, *Looseness*.

518. CH. OF IDIOPATHIC DIARRHŒA;—Unusually frequent, liquid and rather copious stools, generally more or less fœculent;—without, vomiting, violent pain, or primary fever;—and not depending on weakness of the sphincter ani.

519. Strictures on the nosological place assigned to it by Dr. Cullen.

520. Diarrhœa not only varies considerably as an idiopathic disease, but is a common or accidental attendant upon many disorders both acute and chronic, general and local. Hence the necessity of minutely investigating its rise, progress, duration or recurrence,—pre-

515. This is best done by keeping the Patient on
moderate Diet, & the Bowels regularly open

16. Op. is necessary in Plethoric Habit & in Euro-
peans. - The Patient peculiarly suffers from severe
cardialgia. Opium should be given. Colonic has
been exhibited in doses of ʒi or ʒss , but it is the most safe
& useful practice. It may be advantageously joined
with Opium. The warm Bath will also assist.

520. Cholera is a vomiting & purging of bile, the Motion
Diarrhoea is an increased discharge of ^{liquors} ~~liquors~~ from the
Glands of the Intestines, without pain or vomiting - and
Dysentery is an inflammation of the mucous membrane of the
Intestines accompanied with mucus or bloody evacua-
tions, great pain and tearing Tenesmus.

521. When the Stools are fetid, it is an indication that there
is something remaining in the Intestines requiring removal,
but by exhibiting a Purgative at first we may reduce the
strength too much, therefore we should moderate the discharge,
a little, and then give Medicines to correct and bring away the
fetid accumulation.

D. Coeliac. This is generally accompanied with
disorder of the Stomach & Bowels & is an obstinate
form. - When Blood is passed from the small
Intestines it will be mixed with the Faeces, but
if from the large unmixed, it may either flow
out, or assume a regular form, from the fluid
part being absorbed. If the Stools are very ba-
lony and produce pricking, it is an indication
to exhibit something to get rid of it.

ceding and accompanying symptoms,—and assigned or probable causes,—in order to determine its nature, or direct its treatment.—Circumstances distinguishing Diarrhœa from Dysentery, and from Cholera:—alliance between these, and mutual conversion of them, shewn.

521. Variety in the colour, &c. of the matters evacuated, giving not only particular denominations to certain forms of the disease, but also affording important instruction as to their especial seat and cause:—viz. their being stercoraceous (*D. crapulosa*);—containing undigested food (*Lienteria*);—being chalky;—yeasty:—inky (*Melæna*);—yellow (*D. biliosa*);—green, curdly (*D. infantum*)—glairy (*D. mucosa*);—milky (*Cæliaca*);—serous (*D. colliquativa*);—bloody (*D. sanguinolenta*,—*Hepatirrhœa* ?);—puriform (*D. purulenta*):—or, their being fetid,—acid—or nearly inodorous, &c.—being copious or scanty;—occurring chiefly in the day, or in the night;—soon after taking food,—or at any regular or more distant interval.

522. PREDISPOSING CAUSE. Original or acquired irritability of, or tendency to increased secretion from, the surface of the intestines.

523. EXCITING CAUSES. Cold applied, especially to the lower extremities.—Fear,—Anger,—and some other mental affections.—Diminished or suppressed perspiration.—Crude or sour fruits,—vegetable acids,—or fermenting acescent liquors.—Particular articles of food in individuals, though inoffensive to others.—Sudden change from animal to vegetable food,—and the reverse.—Change in the water, &c. used.—Hypercatharsis from drastic purgatives, or from acrid matters swallowed.—Certain contagions.—Spontaneous Recession, or artificial Suppression of cutaneous Eruptions,

or stopping profuse or habitual discharges from sores, &c.—Metastasis of external inflammation.—Irregular, but oftenest defective state of the Hepatic functions (527).

524. Enumeration of diseases in which diarrhœa is a common and prominent symptom,—and in which it sometimes proves critical and salutary,—but often so much the contrary as to demand special attention, e. gr. Fevers,—Dentition,—Worms,—Phthisis, &c.

525. PROGNOSIS,—to be drawn from a consideration of the patient's age,—constitution,—and previous state of health;—the assignable causes of the disease;—its duration,—attending symptoms,—and effects,—with the remedies already employed, and their operation.

526. TREATMENT. This necessarily very different, from the various nature of the disease; and often can be only palliative; but if the discharge be not salutary, and therefore demanding encouragement or regulation,—the leading indications will be—

A. To allay morbid irritability of the intestines;—by Opiates.—Tonic bitters, as Calomba,—Samarouba,—Lichen Islandicus, &c.—Astringents, as Hæmatoxylon,—Catechu,—Kino,—Resina Acoroidis,—Infus. Glandis Quercus torrefactæ, &c.—Calamine,—Sulphas Zinci.—Alumen, Acetas Plumbi? &c.—Cautions respecting astringents.—Choice of these several articles, as respectively adapted to particular cases; and modes of administering them.

B. To expel or correct any preternatural stimulus applied to them;—by Emetics,—Purgatives,—Glysters;—Mucilaginous diluents;—Alkalies,—Antiseptics.

C. Where, as generally happens, the causes A

524 ^{there is a lip loaded Tongue} When it occurs towards the conclusion of fevers when
the Pulse is lip frequent & soft, there is a gentle Diaphoresis
which is usually ~~juv~~ beneficial, therefore it should
only be moderated - In Pustulation generally owing to an
excess and secretion of Bile and is to be considered favourable,
and only requires slight moderation - As Worms are the
cause of Diarrhoea, our indication is to remove them -
In Phtisis we find it alternating with colligative sweats,
should in all cases be checked. Sometimes it is accompanied
with hot skin and attended with sweating - Dr. Harvey found that
Diaphoresis to be connected with inflammation of the Intestines.
Just this is a salutary Discharge: If it occurs early in
small Pox it must be looked upon with auspicious

26. C. When it is accompanied with Jaundice. Operates with
medicines which determine to the Skin; when it has continued
a long time and it is lowering the strength they should be
joined with Laxatives, as Colocynthis, particularly if it be accom-
panied with Bile - Dr. C. prefers Cassia of Colocynthis if it be to
be given - Rhenish Solvent sometimes increases the Dis-
charge in Phtisical Cases - Kino is particularly applicable
known to us as it checks the Discharge without producing
stagnation or Diaphoresis - R. Kino gr. x - xv Pulv. fine l. & Opio. f. x v
Dr. C. has found this succeed when others have failed -
Alph. Zinc is a Laxative as well as Astringent and does not
depress the Heart, often found useful in Pustulation, joined with Opium
in a Symplic. Alum. loses its astringent effect if given in
large doses as gr. x but on the contrary produces a Discharge
from the Intestines, it is from this reason that it has been
given in Colic with Opium. The preparations of Lead with
Opium will be found the most useful Astringents.
Dr. C. has known the Aloes succeed, stay on the Stomach when other
Laxatives would not. Zinc is useful in the colligative D.
dependent on Phtisis. When the Discharge from the Bowels
is mixed with Blood, and the indication is immediately
checked, Alum. in the Tinct. Rosa will be the best remedy.
Dr. C. does not think the Astring. Plum. as useful as Alum.
Laxatives are improper on the first attack of Diarrhoea, but
after the Purgative shall be given, afterwards they may be ad-
ministered either alternately or alone

B. When the Discharge is from putrid Offence, & accompanied an Emetic will be first taken. Where there is any acidity in the Stomach in the Dawn, Alkalies joined with the other remedies will be advantageous.

B. In Leucorrhoea, an Emetic will be found particularly useful, as it is often followed by Fever. When there is Sickness in the Bowels it is generally owing to an accumulation of viscid Matter which should be removed by Purgatives, where Strictures are looked upon the Bowels, which is known by the Pain, they should be joined with Opium, otherwise they come away without producing a sufficient effect. Glysters will frequently prove useful in removing Obstructions in the lower Bowels and more so if joined with Opium. When an active remedy has been taken an emollient drink should be given to soothe the Bowels. Where there is much Heat in the Discharge, or it be mixed with Blood, and is apt to inflame the parts, & gives the Salph. Acid in form of Symplice with a few Drops of the Blush Drop

When there is Dyspepsia with Acidity the combination
of Soda, Pepsin & Colman's will be a very useful
medicine. In cases of obstinate D. Df has seen over the
the body with Plaster a most advantageous adjuvant
is most extremely necessary to pay strict attention
the Diet and of late I have been forced that it is better
keep Patients on a very light Diet particularly Children

When accompanied with an affection of the Lungs
and Trachea will be proper, when of the Pleurisy
when it assumes the chronic form it is only to be conquered
by attention to Diet. Liquefied diet will be useful
When there is acidity in the Stomach from the Puff of Heat
When there is great Irritation of the Bowels and the Matter
requires to be evacuated. The most Olee. & Opium will be best
In the Dysentery of Children owing to Dentition & is strongly
recommended Rhine Soda & Gum. In Chronic D. Rhine Soda
Theophrastus; Puls. will be useful either with or without Conf. Op.
Dec. Liliac. is a favorite remedy as a Tonic, it is most proper
as a Drink. The Puls. Dover is the best Diaphoretic.
a Farinaceous Diet is the most proper. Baked wheat Flour
rolled hard & baked hard, grated into milk has been found
lately very good diet.
At the same time I will suggest to give some Mercury
at night.
527. Dysentery is often attended with deficient secre-
tion of Bile and it will not give way if this be not atten-
ded to. Therefore you should give small doses of Mercury
with Tonics & Costicives.

529. It is said that when Dysentery is accompanied
with Fever, that it is contagious, but Dr. doubts this,
altho Dr. Fuller & many other Authors state it to be so.

530. When it occurs as an Epidemic, it is generally
accompanied with violent Syphoid symptoms, but
in the sporadic form it is usually associated with Syphoid.
We do not find that the Patient complains of pain,
unless continued violent pressure is made on the Abdomen.
In warm climates Dysentery frequently follows Suffering

and B are combined, so must the remedies be either jointly or alternately employed; whilst due attention is paid to any derangement in those organs which directly or sympathetically affect the intestines,—as the Stomach, Skin, and Liver.—Aq. Calcis cum Lacte.—Prep. of Chalk, Testaceous Powders,—Boles.—Haust. Oleosus cum Tinct. Rhei.—Pulv. Rhei. cum Soda.—Dec. Ulmi.—Determining to the skin by Diaphoretics,—tepid bath,—warm clothing,—friction,—gestation.—Restoring suppressed discharges, or establishing equivalent ones:—reversing inflammatory metastasis.—Suitable diet.

527. Necessity of a due performance of the Hepatic function, to the healthy state of the intestines, illustrated by cases;—and successful treatment of apparently idiopathic diarrhoea, both recent and chronic, upon that principle.

OF DYSENTERY.

528. Origin and meaning of the name.

529. CHARACTER. Violent griping, tenesmus, and straining at stool, attended with frequent, scanty, and mucous or bloody discharges from the intestines, while the proper fœculent matter is for the most part retained:—generally accompanied by pyrexia, either primary or secondary, and frequently contagious.

530. Detail of symptoms attending the rise and progress of the disease; and variety in the state of the pulse, skin, tongue, &c. accordingly as it is—sporadic or epidemic,—as without or with pyrexia,—as simple, or as preceded by Cholera,—or combined with Intermitting, Remitting, or Typhoid fever,—with Hepatitis, —Enteritis, &c.

531. Examination of its alledged identity with Rheu-

matism (*Rheuma intestinorum*. Coel. Aur.) and its contagion being that of Typhus accidentally conjoined. Refutation of this idea, and proof that its contagion is specific.—Striking examples of Dysenteric contagion being generated *de novo*.—Account of the animalcular hypothesis of Linnæus.—Analogy between the different forms of Catarrh and of Dysentery respectively; illustrated by a comparison of the symptoms in each.

532. Variety in the morbid appearances of the intestines and neighbouring organs after death; and explanation of several phenomena of the disease, deduced from thence; as well as collateral support thereby given to a particular mode of treatment.

533. PREDISPOSING CAUSES. A particular, and perhaps original morbid tendency of the intestinal canal, probably analagous to that in diarrhœa (522), but modified by the exciting causes, whether Contagion, or common agents.—A morbid state of the hepatic system, however induced; often *merely functional*, but sometimes *organic* also.—Poor farinaceous,—or salted animal food.—Scorbutic diathesis.—Epidemic constitution of air.—Autumnal season.

534. EXCITING CAUSES. The peculiar Contagion, sometimes generated *de novo*, but oftener propagated from one to another by those labouring under the disease:—different modes in which this has been supposed to act.—Sudden alternation of heat and cold, especially if accompanied by dampness.—Accumulation of human effluvia under certain concurring circumstances.—Sulphurated Hydrogen Gas?—Sulphureous Acid Gas?—Crude austere fruits, &c.—Worms.—Drying up of extensive ulcers;—Suppression of chronic erysipelatous, herpetic, or other eruptions.

531 Dr. considers Dysentery to be an Inflammⁿ of the mucous membrane lining the Intestines, she has generally found it confined to the large.

532 In Cold Climates the Inflammⁿ is generally confined to the large Intestines, and if the Patient survives the acute form, the whole part goes into a state of Ulceration. sometimes met with Induration and Congestion in Liver and Spleen. Dr. has never seen the small Intestines diseased. Chronic D. occurring in Persons who have lived long in warm Climates is generally owing to disease of the Liver produced by Intemperance in living - warm Climates Dr. has said that the Inflammⁿ extends to small Intestines also, as well as the ulcer at Stricture. 533 The Lacum is more commonly diseased. When it arises from functional disorder of the Liver - find that Children will not complain of pain unless any pressure is made on the abdomen.

534. Mr. Wilson states that he has known Dysentery cured by Dysipelas taking place.

536. In Dysentery the stools are mucous or bloody, or both. There is distressing ^{concurrent} tenesmus, and pain full or pressure over the Hypogastric Region - In Dysentery the discharge is faeculent and pain or tenesmus is by the rectum the bowels are open, and the stools faeculent, no tenesmus & the Pulse full and hard - In Colic the pain is shooting, the muscles contracted, and stulticate constipation. In Cholera there is vomiting and purging of bilious matter. In Haemorrhoids the pain is confined to the Rectum, when blood is passed it is generally in large quantity. It produces no uneasiness but on the contrary relief.

537 When it occurs in a Person who has lived long in a warm Climate, it generally proves fatal, and if the Patient passes a large quantity ^{of blood} this is unfavourable unless the Heat is not much reduced - also when it follows the use of Mercury or occurs as an Epidemic.

538. A. B. is only necessary in Dysentery when it occurs in the Inflamed form - but it must not be carried to the extent it is in Enteritis. As it is generally accompanied with tenderness of the bowels, leeches may be applied - but Blesters have been found more serviceable than Topical Bleeding.

535. PROXIMATE CAUSE. Inflammatory state of the mucous membrane lining the great intestines, with constriction of their muscular fibres.—Difference of the pain, in *acute* and *chronic* stage.

536. DIAGNOSIS. Marks distinguishing Dysentery from Diarrhœa, — from erythematic Enteritis, — from Colic, — from Cholera, — and from Hæmorrhoids.

537. PROGNOSIS, to be founded on—the age, — constitution, and previous health of the patient; — the number and degree of the symptoms, — their duration and consequences; — the general tendency of the epidemic: — the remedies already employed, and their effects.—*Favourable symptoms*; diminution of pain and of calls to stool; — reduced frequency and hardness of pulse; — equable moderate warmth, and gentle diaphoresis; — scabby eruptions about the mouth: — miliary or other eruptions; — increased consistency, and fœculent appearance of the alvine discharge.—*Bad symptoms*; violent fever with delirium, — or cold viciid sweats, with great prostration; — tension and tenderness of the abdomen; — worms coming away spontaneously; — aphthæ of the fauces; — singultus, &c.

538. THE TREATMENT will require to be varied considerably, according to the circumstances mentioned in par. 530; — but chiefly as the disease is *acute* or *chronic*.

In the early stage and more *acute form*, the principal indications are,

A. To lessen inflammatory action, whether general or topical; — by venesection? — leeches; — cupping; — blisters. — Consideration of the circumstances under which these are respectively proper.

B. To remove the irritation given to the primæ viæ from the remains of alimentary matters lodged there

or from their own diseased secretions ;—by—(a.) Emetics,—(b.) Purgatives,—(c.) bland mucilaginous diluents. —Choice of individual articles best suited to each of these purposes in certain cases.

C. To take off the excessive sensibility of the intestines, and thereby allay pain, and relax spasmodic constriction ;—by Opiates, assisted by the warm bath, fomentations, and embrocations. — Common objection against the early use of Opiates, examined,—and shewn to depend upon trusting to them alone.—Rules for their employment, in alternation or conjunction with other remedies.

D. To restore a due balance between the functions in general ;—by augmenting those that have been diminished, and correcting those that have been vitiated.—Application of this more especially to the cuticular and hepatic functions (533-4) ; and explanation thence of the benefit arising from the employment of Sudorifics, and also of simple bitters,—Antacids,—and Mercury,—illustrated by cases and authorities :—with directions for their choice and management.

539. Occasional variation necessary in the order and extent of these indications.—Particular treatment required where the dysentery is joined with Intermitting, Remitting, or Typhoid fever, &c. (530) ; and mischievous effects arising from the indiscriminate use of Astringents and Stimulants.

540. Remarks on particular remedies alledged to have a specific power ;—Ipecacuanha ;—Vitrum Antimonii ceratum ;—Mist. Sodæ Muriatis cum Succo Limonis, &c. &c.

541. Period at which Dysentery may be deemed CHRONIC.—Variety in the appearance of the stools, indicating the probable *degree* and *mode* in which the

B. Purities are powerful and useful remedies in the beginning of this disease, unless it is accompanied with Cholera, from their action on the skin and bowels, in the inflammation where it could not be employed Dr. has given ^{Hyacinthina} in doses of six grains repeated every six hours, it first produced vomiting and then Stupor haemorrhage and acted on the skin and bowels. Preparations of an oily nature should be frequently used and they will be assisted by an emollient. Diluents.

4. When the fever assumes the Inflamed Stage the preparations of Antimony will be best Emetics, but if the effluvia, then Hyacinthina is better. Swelling the Body in Flannels has been found advantageous, it gives a support to the Bowels and keeps up an action on the skin. Dr. Ferguson states that a combination of salomel and cascara never fails opening dysentery, he gave varied doses of 6 grs. 3 grs. 1 gr. every four hours until it acted the fourth day. Dr. gave five grs. of salomel twice a day to a Patient in Hospital who was rapidly sinking, and when this became affected the Patient got well. Dr. Bittors will be necessary to keep up this time of the week when the disease is dysentery. Dr. found that the combination of salomel with Antimony or cascara prove most beneficial to the troops who had dysentery from wetting. But the salomel alone was not so good. Dr. does not rely absolutely on Hyacinthina, but gives small doses of salomel with doses of Hyacinthina. J. Pungit has given the bit. ant. emet. in doses of 10 grs. Dr. has been given in hot climates and found a very useful remedy, but Dr. has not experienced much advantage from it in this country.

In the Dysenteries which occurred in the Island
off Caylon, Dr. Darg gave a full dose of Opium and
he found it relieved the Pain and thus allowed
the Bowels to act. Opium when given in large
doses will frequently instead of constipating the
Bowels produce a contrary effect.
Opium alone is improper in the beginning of
this Disease in this Country, but if combined with
Purgatives, sudorifics or Calomel they will be ex-
tremely useful.

D. D. has frequently observed a great degree of sourness
in the Stools, & here must be the case Antacids, as
the Alkalis, or alkaline Salts are necessary

539 When combined with Intermittent Remitting Fever, we find
that the Dysentery is considerably aggravated during the
Exacerbation of the Fever, therefore we should endeavour to check
it or prevent its return -
539. When combined with Intermittent D. D. prefers
a full dose of Opium joined either with Sudorifics or
Mercury. When attended with Remitting Fever. Mr.
Kempson's Treatise will be best. And if both Typhus
we must not carry our Remedies too far, we give small
doses of Mercury with Opium & Sudorifics, also small
quantities of Urine. If it is combined with Scanty five
animal Acids and Subacid Fruits &c.

Altho we may check the discharge for some time
by the use of Astringents, still we shall find that it
will return with increased violence -

542. When there is much Rain in the Region of the
River the application of Lapping Glasses will be necessary.

545. Mercury is a remedy that would be found extremely
useful in Chronic Dys., but it is doubted how far it may
be proper for Persons who have resided long in warm Climates
in which it has been recommended to keep the Bowels open
by the Mineral Saline Waters. Dr. has generally given Mercury
in the Cases which have occurred in this Hospital, where the
Bowels were not gone too far into a state of relaxation.
The Mineral Acids have also been advantageously employed
in the same Cases. The Dil. Sulph. & the Army above with
cesses. The Antacid Facies would form an extremely
useful remedy and Dist. when the Bowels are only in a
slight state of relaxation.
In general we find that pushing the Mercury too far,
introducing it too speedily will be prejudicial, as it
shows the constitution exceedingly, but this is not invari-
ably the case as an instance is mentioned to prove the
contrary. but the safest plan is introducing it slowly,
the same time strengthening the constitution by Tonics &c
if the Patient is of an exoragous Habit, the exhibition
shall may be advantageous.

541. Dysentery may be called Chronic, when the Acute
pain in the Bowels subsides, and the Heat of the
Skin & thirst are relieved, the Pulse becomes healthy
and the Urine clear & the Appetite begins to return.

When the Intestines are going into a state of ulcer-
ation, we frequently find the stools streaked with
Blood, and there is a small quantity of Pus mixed
with them, and there is increased pain in the Bowels.
When the ulceration is more extensive than what
is resembling washed meat are mixed with the stools.
When the small Intestines are diseased, there will be
Gurgles, frequent stools, and pain in the Epigas-
trum as well as the Hypogastric Region.

When the motions contain very bile there is much Icterus
& Jaundice, we have an indication to give a gentle Purga-
tive, but this is often connected with ulceration of the Intestines.
The Spleen is very often diseased in Chronic Dysentery and much
more frequently there is generally supposed.

543 In the beginning we generally find that there is violent
Icterus produced by an accumulation of Scybala, this
may be relieved by a gentle Purgative as. Pl. Ricini with a few
drops of Laudanum added to it. When the Dys. is accompanied
with dyspeptic symptoms the Pulv. Stic. & Soda will be benefi-
cial or if combined with the same.

544. Opiate mixtures will be proper when there is ulceration
of the Rectum, or a piece of solid Opium may be introduced
into the rectum and allowed to remain.

546. Broths containing a small quantity of vegetable
acid will be proper, also whey. So much Pus as has
been had a small quantity of wine should be allowed.
Fermenting liquors are always prejudicial.
The warm Bath with friction will be advantageous in
preventing future Attacks.

intestines are disordered ;—e. gr. simply mucous (*Dys. alba vel mucosa*), streaked or tinged with blood (*Dys. cruenta*)—ragged,—scyballous, &c.—Symptoms indicating disease in other of the abdominal viscera, functionally connected with the intestines, and requiring particular attention in the treatment of the ostensible complaint ;—as the liver, stomach, &c.

542. IN THE CHRONIC DYSENTERY, with the exception of bloodletting, the *general* indications are the same as stated in the *acute* form, (A to D) ;—but differing in the less activity of the individual means employed, proportioned to the slower progress and more organic nature of the disease.

543. Remarks on certain articles suited to Indication B.—Ol. Ricini ;—Ol. Olivæ cum Tinct. Rhab.—Pulv. Rhab. cum Soda.——Lac cum farina tritici et sevo ovillo ;—Cera cum Sapone.—Demulcent glysters.

544. Articles adapted to indication C.—Opiate frictions and injections.—Extr. Hyoscyami, &c.

545. Explanation of the principles upon which the Mercurial treatment is to be conducted, grounded on long experience.—Observation on certain articles co-operating with Mercury, or proving occasional substitutes for it ; and an account of the effects of ripe saccharine or subacid fruits in obstinate dysenteries.

546. Diet and regimen proper during the convalescent state, to prevent relapse, and guard against future attacks.

OF HÆMORRHAGE IN GENERAL.

547. Origin of the term.—Improper restriction of it by Sauvages and Vogel, to signify one particular discharge

of blood.—SYN. *Sanguifluxus*, SAUV. et SAGAR.—Anglicè *Bleeding*.

548. DEFINITION. An excessive, and generally preternatural flow of blood from any part of the body.—The universality of this definition shewn.

549. Division of spontaneous hæmorrhage into two principal forms, viz. the *Active*, or that accompanied by, and chiefly dependant upon, a general increase of force as well as frequency of arterial actions ;—and the *Passive*, or that which happens without such general action, but merely from congestion, or from extreme weakness of vessels, with or without a dyscrasy in the blood. Remarks on the remote places assigned to these by Dr. Cullen in his Nosology ; and on the definitions and very dissimilar names he gives them.—Terms, *Hæmorrhagia*, and *Hæmorrhœa* proposed to designate them respectively.

550. Comparative frequency of one or other form (549).—Distinction of hæmorrhages as being *critical* and *salutary*, or the *contrary* ;—and the diseases in which the former more especially happen, as well as the parts from which they chiefly take place.—Division into *casual*, and *periodical* ; with the periods that are most common, and the probable causes.

551. The genus usually denominated from the *source* ; e. gr. from the nose *Epistaxis* ;—from the lungs *Hæmoptoe* ;—from the stomach *Hæmatemesis* ;—from the rectum *Hæmorrhœis* ;—from the kidneys or bladder *Hæmaturia* ;—from the uterus *Menorrhagia* ;—&c. &c. Enumeration of compound names that would express both the *source*, and the *form* (549) of the disease, viz. —from the nose,—*active form*, RHINÆMORRHAGIA,—*passive*, RHINÆMORRHŒA ; from the Lungs,—*active*,

550. A discharge of blood sometimes takes place early
in continued fevers and is salutary, but we must not
confound it with that which occurs in the latter stages of
fever and which is extremely difficult to stop and will be
very prejudicial.



554 We find that the Blood which comes away is much
longer in coagulating than ordinary and that it has
rather a viscid appearance. In inflammation the extremities of
the Ducts are constricted, whereas in Hemorrhage they
more readily transmit the Blood, and there is certainly
an increased action in them.
We may here remark that Hemorrhage is produced by the Powers of the
Mind without any alteration of the Solids or Fluids.
In determining the nature of the Hemorrhage we must
be regulated by the force of the Circulation, more than
by the colour of the Blood -

HÆMOPTORRHAGIA,—*passive* HÆMOPTORRHŒA;—from the Uterus,—*active* MENORRHAGIA, *passive* MENORRHŒA; from the intestines,—*active* HÆMENTERRHAGIA, *passive* HÆMENTERRHŒA, &c.

552. Approach of *Active* hæmorrhage marked by sense of general heat and fulness, or by sudden flushings, sometimes alternating with chilliness;—but always accompanied by unusually frequent, generally throbbing, and sometimes hard pulse;—together with certain uneasy feeling, referred especially to the part from whence the blood is about to flow.—Where the vascular action arises from general hæmorrhagic commotion or effort, it subsides more or less as the bleeding proceeds;—if not, some other cause of pyrexial irritation may be suspected.

553. Account of Solano's observations on certain states of the pulse as indicating the period and degree of approaching hæmorrhage:—have been countenanced by a few persons of authority.

554. Difference between the texture of the blood in active hæmorrhage and in inflammation; and explanation why inflammatory complaints seldom attended with discharge of blood.—Question whether the Solids or the Fluids primarily in fault, discussed;—and reasons for believing, that spontaneous hæmorrhage, both active and passive, proceeds in a great degree from an assignable cause hitherto overlooked.—Difference of colour of the blood in *active* and in *passive* hæmorrhage (549); and the conclusion usually drawn from thence, with respect to the immediate source of each, shewn to be liable to considerable doubt.

555. PREDISPOSING CAUSES. Original constitution which may be denominated *Hæmorrhagic*;—often connected with Sanguinous Temperament, but sometimes

with different exterior character, and then seemingly owing to particularly weak vascular structure of certain parts:—both often hereditary. — Plethora, — whether arising from full living, from indolence, or from the stopping of natural or customary discharges:—Dr. Cullen's explanation of the mode in which periodical bloodletting occasions plethora, objected to, and another offered.—Original mal-formation of certain organs,—often connected with, and supposed to depend upon, defective shape and size of external parts.—A tendency to recurrence—begotten by repetition.

556. Account of the successive developement of certain parts of the body in the progress of growth; and explanation why the tendency to Epistaxis and to Hæmoptoe, most remarkable at particular ages respectively. —Change in the relative capacity and condition of the Arterial and Venous systems after middle life, described; and corresponding change in the *nature* and most frequent *sources* of hæmorrhage at that period, pointed out.

557. OCCASIONAL OR EXCITING CAUSES,—whatever can increase the violence of the general circulation, or augment the impulse of the blood in vessels that are weak or slightly supported.—e. gr. External heat; notion that it acts by expanding the blood, disproved:—its true mode of operating shewn.—Diminished pressure of atmosphere,—as on ascending high mountains: Expts. of Dr. Darwin, confirmed by Dr. Simmons and Mr. Cline, proving, that it does not act by rarifying expandible air in the blood. Dr. Darwin's conclusion, of its inefficiency as a cause of hæmorrhage, refuted; and its effects explained and illustrated.—Violent muscular efforts,—as running,—lifting great weights,—long and

555 When there is any original malformation
of the Chest, the Patient is generally very liable
to Haemoptoe.

A. D. doubts whether the Mineral Acids should be given
in cutive hemorrhage, for the Sulph. which is pre-
sently ordered possesses tonic power.
~~If there is any~~ ^{surely} ~~of falling~~ remaining after we have
employed C. truly, the violent attraction of blood
will be suspended.

558. The degree of danger depends on the slowness of the discharge of ^{the} blood. for the extent to which the Humour may escape if it come away slowly is very great, without being fatal.

561. The Temperature of the Room should be kept as cool as the Patient can bear without danger by sprinkling the Floor with water. We may often stop Transpiration by unbuttoning the Patients Clothes & exposing the Breast to the cold air. Dr. Bat. recommends the Groin of the Chest to be kept wet with Cloth dipped in Camph. mixture. The Patient should make use of very cold Drinks, as Ice cold Water, you may produce this by a mixture of Rum. & Lemon: & Liqueur in Water, also Liqueur largely diluted. $\frac{ij}{\text{ss}}$ to $\frac{vi}{\text{ss}}$. In Rum from the Lemons Dr. thinks little may be given freely and with advantage, but not so in that from the Stomach & Bowels for the Vegetable Acids will be preferable and more useful.

loud speaking,—blowing wind instruments.—Posture ; —as depending position of the head in Epistaxis,—erect sedentary one in Hæmorrhoids.—Tight ligatures round the neck or limbs.—Fits of anger ;—other mental emotions ?—Excess in spiritous liquors.—Use of Opium in apoplectic diathesis.—Doubts respecting the alledged effect of cold as a cause of hæmorrhage.—Blows, falls, &c.—Destruction of blood-vessels by cancerous, syphilitic, or other ulcers.

558. PROGNOSIS ; To be drawn from the age, original constitution, and previous health of the patient ;—the form (549), source, and causes of the hæmorrhage ; —its habit of recurrence ;—its degree, and the effect it has had upon the constitution. Account of prodigious quantities of blood lost, where the persons notwithstanding recovered.

559. Examination of the doctrine of Stahl and his followers,—that spontaneous hæmorrhage was an effort of the constitution to get rid of something hurtful ; and therefore seldom to be put a stop to.

560. THE TREATMENT in detail ; as applying to HÆMORRHAGE IN GENERAL, extremely various ; but in a great measure directed by the *form* (549) of the disease.—In

ACTIVE HÆMORRHAGE.

561. The indications are,—A. To avoid or remove such occasional causes (557) as may still continue to act,—by regulation of atmospheric temperature, clothing, &c.—Abstracting heat from the body by—cold applied to the surface—to the stomach,—to the intestines : —different means of effecting this.—The use of poten-

tial refrigerants, as Nitre, Acids, &c.; remarks on the circumstances in which they are useful or proper.

B. To lessen the distension and impetus of the blood, by—(a.) diminishing its quantity;—by general and topical bloodletting:—different modes of them and their management.—(b.) allaying excessive irritability of the heart and arteries,—by Direct Sedatives, as Digitalis, Acetas Plumbi, &c.—(c.) correcting certain morbid quality of the circulating mass?—Facts tending to shew the influence of the Hepatic function upon the mass of blood (554); illustrated by cases, proving the remarkable success of remedies directed to remove certain morbid states of that function in hæmorrhage.

C. Taking off any accidental irritation arising from the state of the stomach and intestines.—By Emetics, —Purgatives; choice of them in particular cases.

D. Allaying pain, —procuring an equable distribution of blood throughout the vascular system,—and thereby taking off too great determination of blood to particular parts;—by Opiates, Extr. Hyoscyami,—Relaxing diaphoretics:—nauseating doses of Emetic remedies.—Sailing,—swinging, &c.

562. Diet and regimen proper during the continuance of active hæmorrhage, and calculated to prevent a return.

563. Particular application of the principles above delivered, (549-61) to the treatment of *Epistaxis*, *Hæmoptoe*, and other hæmorrhages which most frequently assume the *active* form.

B. V. S. is the most important remedy in Punctures.
This absolutely necessary to pay strict attention to the
state the Patient is then in, and to the Habit of Body -
before we employ the Remedy, for it frequently is had recourse
to improperly, and it is often carried so far as to increase
the Haemorrhage, and such debility is produced - that the
Patient eventually sinks -

A Case which Dr. B. attended of Hamaturia, in which the
Haemorrhage was excessively active, every thing was done which
could be thought of, but in vain, when Dr. Young whose Patient the
ady was, as it was impossible to stop the Bleeding coming on
just before it came away employed the Lancet, which comple-
tely succeeded in putting a stop to the Haemorrhage.
The Haemoptoe Blood should only be taken away in small
quantities at a time. The abstraction of blood by cupping flaps
is to be much preferred. To leeches and they will relieve acro-
ritically if applied immediately after the
ipitalis may be given $\frac{j}{2}$ to $\frac{ss}{2}$ in Powder. \frac{ss} of the Infus. or $\frac{ss}{2}$ to $\frac{ss}{2}$
the Juice. This must be regulated by the effect it produces.
A. Plum. may also be given with Juice - $\frac{j}{2}$ to 1 of $\frac{ss}{2}$ & $\frac{ss}{2}$ to $\frac{ss}{2}$ of
2. Plum. This is an extremely useful Sedative in chronic Hami-
orrhage. We have no proof of a morbid state of the Blood

Opium will do more than keep up an action in the brain,
it will take off any particular irritation if a febrile, is espe-
cially in Hamoptoe the irritation produce of Spitting is relieved,
there must be taken care to give on such occasions as to
allow the matter to collect in the lungs -
If the Haemorrhage occurs from an accident an Spirit should
be given in a full dose to allay irritation; Spirit will be more
effective if combined with Potent remedies and reason Diaph-
oretic Hami. they are often necessary to allay pain.

63. A. Spitz's it is seldom necessary to bleed, unless it is
complicated with Inflam^y symptoms. The most effectual
means of putting a stop to the Bleeding is by mechanical pressure
a Dorsel of Lark introduced into the Nostril.
Haemorrhage from the Pores when they are not counteracted
Infus. Rosa Spina or Hyosi. will be one of the best remedies
the Infus. Ros. & Alum^{but}, if they are confined it should be joined
the same Neutral Purg^y Salt.
Haemorrhage one of the most powerful remedies in
stopping the discharge is the application of cold water to
Pulse.

B. If there is a sense of fulness remaining after we have employed Co., the local abstraction will be necessary.

Ant. Phleb. this medicine should not be given before the Hemorrh. begins to subside.

C. If the Hemorrh. occurs after a full meal, an Emetic will be extremely useful to empty the Stomach of its contents. the Antimony will produce a much more powerful effect on the system than any other remedy.

But in the very beginning when there is a full & hard pulse Emetics are not applicable, unless it is to remove any cause of Irritation from the Stomach - When however the Hemorrhage is bordering on the Passive Character it has never been seen to produce any increase, on the contrary often put a stop to the Hemorrh. therefore after the Hemorrh. effort has subsided & Co. has been employed, small doses of Opium or as to excite & keep up *Uterus* will be extremely useful.

The Saline Purgatives with excite a considerable & easy discharge from the Bowels & therefore considerably relieve the Patient, but if there are any morbid collections lodged up in the Bowels a few grains of Calomel sh^d be first given & afterwards some Saline Purgative -



865 In the passive form of Haemorrhage the Pulse is scarcely affected, & the heat not increased, but there is a sense of ~~fullness~~ ^{fullness} in the part.

A. The application of Ales should be regulated so as to act as a stimulus rather than a powerful sedative. Preparation of Ales & ~~should be given~~ ^{should be given} when there is congestion of the Liver & Carotid artery he gives ovals to act on the ~~arteries~~ ^{arteries}.

B. In Haemorrh. from the Stomach & Bowels small quantities of Ales are generally given in Infus. Rosa. In Haem. from the Lungs & Liver continued with a small quantity of Ales in Infus. Rosa. ~~that~~ ^{the} is given. Ales. Plant. is a powerful remedy in Haemorrh. it is given with Opium; gentle laxatives should be given every two or three days. When the Haem. is taking place from the lower part of the Bowels you have it in your power to use cold Appli. as the Infus. Rosa. weak Infus. of Ales, Oak Bark etc. When there is Prolapus the application of Ales in Dec. with Lime Water D.B. has found ~~useful~~ ^{useful}. The Infus. of Ales & Oak Bark are very powerful external astringents. D.B. has often seen hemorrhaging doses of Specac. check Haemorrh. when other remedies have failed.

C. D.B. has generally had recourse to Specac. with advantage, even by the Cataplasms very much reduced when he gives the more stimulant Dose as American.

PASSIVE HÆMORRHAGE.

564. Gradations of *Active* and *Passive* hæmorrhage mutually approximating towards each other;—and change of the *former* into the *latter* by continuance or repetition.

565. Remarks on the general condition of the system which attends the *passive* form of the disease,—as leading to certain indications of cure opposite to those proper in the *active* form;—and reasons for believing, that a morbid state of the hepatic *function* is common to both.

566. In the TREATMENT of PASSIVE HÆMORRHAGE, the general indications are—

A. To allay pain or other local irritation,—by Opiates—cold applications;—purgatives:—choice of these, and the modes of employing them.

B. To induce contraction and coagulation in the mouths of the bleeding vessels:—by Astringent remedies internally.—Alum,—Kino,—Dec. Salicis,—Maltese Styptic,—Infus. Rosæ,—Sulphas Zinci.—Sulphas Cupri.—Acetas Plumbi, &c. Account of the process of nature in stopping the discharge of blood from vessels mechanically divided; and application of this to the treatment of *passive* hæmorrhage. Observations on Syncope,—on nauseating remedies,—and on the general and topical use of stimulant articles, ex. gr. Ammonia—Ol. Terebinth.—blisters, &c.

C. To restore any diminished or suppressed excretion;—and thereby lessen the determination of blood towards the seat of the hæmorrhage,—by Diaphoretics;—Setons;—Issues;—Emmenagogues, &c.

D: Lastly, to increase the tone and vigour of the

system at large, and correct any dyscrasy of the circulating mass,—by Cinchona, — Myrrh, — Chalybeates, — suitable nutritive food; — friction; — exercise; — cold bathing.

567. Remarks on certain articles alledged to possess peculiar powers in particular kinds of hæmorrhage; — Murias Sodæ; — Ol. Olivæ cum Tinct. Rhei. &c.

568. Special application of the principles laid down (564-6), to the treatment of *Rhinæmorrhæa*, — *Hæmoptorrhæa*, — *Menorrhæa*, — *Hæmentorrhæa*, — (Sp. Melæna, Hepatirrhœa) — *Hæmorrhæa petechialis*; — and *Hæmaturia*, — illustrated by cases.

OF HÆMORRHOIS.

569. Derivation of the name. — SYN. *Hæmorrhoids*, — *Angl.* Piles.

570. CHARACTER: — Discharge of blood, or bloody fluid, immediately before or after the fæces, — generally issuing from soft, livid, and painful tumours, which take place around or within the verge of the *rectum*.

571. Division of hæmorrhoids into *Active* and *Passive*, — into *constitutional* and *local*; — with an account of the circumstances under which the one or the other form more especially occurs, — and the symptoms which accompany and distinguish it. — Strictures on Dr. Cullen's definition, which considers it as always an *active* and *constitutional* hæmorrhage; and reasons for believing that it is very often *passive* and *local*.

572. PREDISPOSING CAUSES. Original laxity of the hæmorrhoidal vessels. — Plethora: — suppression of menstrual or other customary sanguineous discharge. — Inactive and sedentary life. — Melancholic temperament:

D. The mineral Acids combined with the vegetable
Sulphur &c. will be extremely useful & in Hemorrhoids from
the Bowels much preferable to heating Chalybeates.

367. Dr Rush mentions the good effect of Gum. Lada in
Hemorrhoids, but Dr L has tried it without producing any parti-
cular effect, except keeping the Bowels open.
Turpentine is an extremely useful remedy. Particularly in
active Hemorrhoids from the Kidneys, but it must be used with
caution. The Smith Bone Mineral, has been recommended in Hem-
orrhoids from the Bowels. Dr L has generally given the vegetable Acids.
When it is owing to an accumulation in the Primæ Viæ we must
use gentle laxatives as Ol. Olive & Rhin.
Hamatonia the liver Urine is a remedy we may give more readily
than the Balsams.
Hemorrhæa. Prostata: are too apt to keep the Bowels confined.
which should always be avoided.

370. You will find the part projecting, soft and very
sensible to the touch;

57, Where they take place in the active form they
are generally preceded by pain in the Head
about the top of the Urine which is relieved
when the Blood flows.





575. In Melana the Blood is mixed with the Stool.
not so in Piles.

—hypochondriacal and gouty disposition. —Advanced age (556)—The hæmorrhagic habit formed by repetition, disposes to future returns.

573. EXCITING CAUSES. Whatever opposes the free return of the blood from the hæmorrhoidal vessels, whether hardened fæces,—distended Uterus from pregnancy, &c.—preternatural tumours within the abdomen;—or obstruction of the Vena Portæ, from congestion, torpor, or induration of the Liver.—Frequent use of purgatives, especially Aloes.—Erect sitting posture.—Modes in which these causes appear respectively to operate.

574. Difference in the state of the tumours, accordingly as they consist of varicose veins,—or of blood effused into the cellular membrane;—as they are painful or indolent;—bleeding or *blind*;—compressible and fugitive, or indurated and permanent.—They occasionally suppurate, and discharge externally; and when they do so within the rectum, are perhaps the most common origin of *fistula in ano*.

575. DIAGNOSIS. Symptoms distinguishing Hæmorrhoids from Dysentery,—and from Melæna.

576. Enquiry into the opinion advanced by some eminent physicians,—that the hæmorrhoidal discharge should often be permitted or encouraged rather than suppressed,—as giving great relief to complaints of other parts, particularly the head. The reason of its proving salutary or critical in such cases, explained;—and proofs given of its being even then the index of another morbid state, which may and ought to be removed by other means.

577. PROGNOSIS. Generally favourable where the patient is young, and the disease of the *Active* form: but the contrary in advanced life if the bleeding be profuse,

the general strength impaired, or any of the important viscera be unsound.

578. THE TREATMENT, — (as in hæmorrhage in general) considerably regulated by the *form* of the complaint (549); but in a great degree also, by circumstances peculiar to its situation, as well by the predisposing and exciting causes, (572-3), and the particular state of the tumours (574).—As far as it is either an *active* or a *passive* hæmorrhage, and *dependant upon a corresponding condition of the vascular system at large*, the several indications already given (561, 566), will apply; but in its *passive* form, it is much more influenced by local circumstances than most other hæmorrhages, and accordingly demands some means especially suited to itself.

579. The special indications then, are—

A. To lessen or remove as far as may be, such exciting causes (573) as continue to act,—by cooling or mild purgatives;—laxative articles of food, especially of the vegetable kind;—regular habit of going to stool;—Mercurial preparations, either cathartic or deobstruent as the case requires.

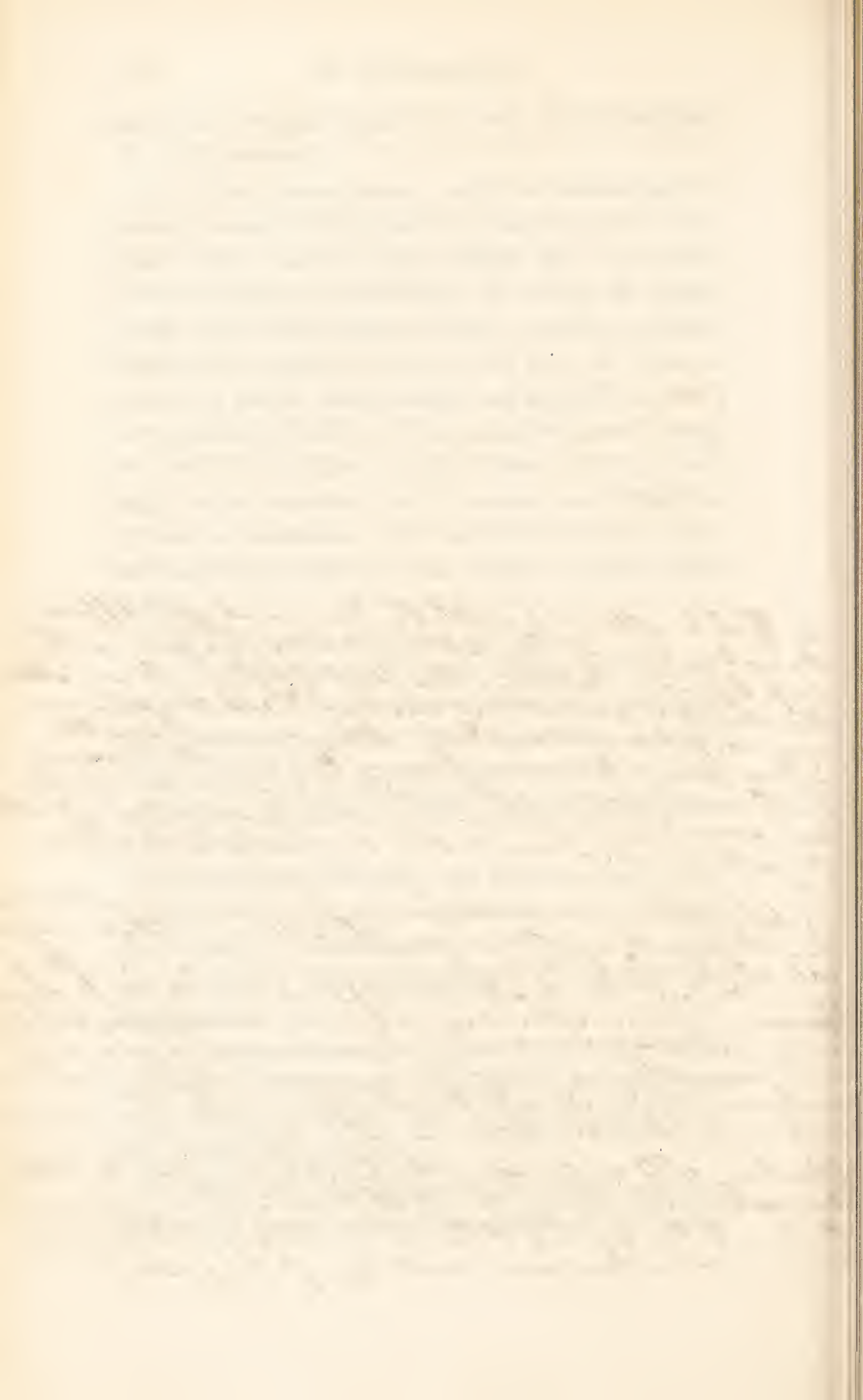
B. To diminish the bulk, and allay the pain of the tumours, — by Leeches, — puncturing:—Aq. Plumbi Acet. Comp. — Fomentations:— Opiates internally and externally; Extr. Hyoscyami;—Cataplasma Fol. Belladonnæ.

C. To restore tone and vigour to the vessels which had been over distended, or ruptured,—by local cold bath,—astringent lotions, &c. of Alum, Sulphate of Zinc, Galls, Oak-bark, &c.

580. Remarks upon certain articles of the stimulant kind which prove particularly beneficial in chronic

A. If it be attended with the Hemorrhagic effort
the cooling & mild Purgatives will be proper as the
conf. Lignum & Sulphur on the Pleth of Hippo. Great atten-
tion should be paid to Diet. The Rye bread toasted is a
very useful article of Diet. When connected with
Induration or Dissection of any Viscus the Lignum
Resp. may be given as an attenuative, or in a full
dose every night followed in the morning by a gentle
Purgative also local Bleeding will be proper.

B. When there is much pain relieved by evacua-
ting the Bowels, setting over the testis of hot water
will afford relief. When the Inflammation remains after
using the tool, Leeches & cold applications will be proper
Warmth, but in others we require the opposite plan
as in Inflammation & Swell. Th. Which is accompanied
with pain & Inflammation Opium may be applied exten-
sively introduced into the Rectum - The Hyoscyamus
will be preferable to Opium when pain is increased by
dashing cold water over the part will often be atten-
ded with a good effect. One of the best applications is
Powder. Gum Zij ℥ij Plum. Arab ℥ij ℥ij ℥ij
made into an Ointment with ℥ij of Hoglard.





580 Thirty Drops of the Bals. Opium may be given
three times a day or sugar. White Pittisone very
beneficial in Chronic Pills. 2-3 times a day.
They will restore the tone of the Stomach & not
jelly on the Bowels.

582 In addition to ^{the Patient} Capitudo you will have a mar-
ked paleness in his countenance, the sym. ptoms may
go to such an extent that the Gums will protrude
beyond the mouth, the Teeth become so loose that they
may readily be removed, & the patient become worse than
when suppuration is produced. Haemorrhage may take
place either from the Bowels, Nose, or Lungs. The last
of these may be so great that if you suddenly see
he lying in the horizontal position & apparently
at comparative ease, if you suddenly raise him
in bed, he will die in your arms. The reason of
this is obvious from the excessive debility & coagulation
of blood takes place in the lungs so that the
Heart cannot act.

584 Whatever tends to debilitate the constitution,
thus the most indurated in the ship are the
most liable to this Disease

hæmorrhoids;—Bals. Copaibæ,—Ward's Paste, &c.
 —Management necessary when the rectum is prolapsed.
 —Circumstances under which extirpation of the tumours becomes adviseable.

OF SCURVY.

581. Origin and meaning of the name.—Scharbock, Teut.—Vague and dissimilar ideas attached to the term *Scurvy* as often used in common, and not unfrequently in medical language: its strict and proper meaning.

582. GENERAL CHARACTER. Debility, lassitude, and dyspnœa,—with foetor of breath,—spongy swelling and bleeding of the gums,—livid blotches on the skin,—swelling and hardness of the legs, contraction of the hams,—dejection of mind,—and faintness, or even syncope upon exertion;—without fever.

583. Detail of symptoms marking the several stages, and most aggravated degrees of the complaint;—and description of the morbid appearances exhibited on dissection, accounting for the variety of circumstances observable in individual cases.

584. PREDISPOSING CAUSES. Original constitution, often marked by tendency to corpulence,—very generally by sluggish disposition of body, and inactive desponding turn of mind.—General debility from preceding illness of any kind.—Disease of the chylopoietic organs especially.

585. EXCITING CAUSES. Diet affording unsuitable kind, or inadequate quantity of nourishment; but particularly salted or corrupted animal food, with defect of fresh esculent vegetable matter:—scanty supply, or bad quality of water.—Coldness of climate, season, or situa-

tion,—especially when combined with moisture, and foggy atmosphere.—Excessive fatigue,—or idleness and inaction.—Depressing passions.—Foul air, especially from stagnant water, marshes, &c.

586. Why this disease little known to the Greeks and Romans;—why particularly frequent in extra-tropical climates, and during long voyages and cruises;—and why much less so now than formerly.

587. Account of the different theories which have been offered to explain the phenomena of the disease, and determine its nature; particularly with respect to its being primarily a disease of the *fluids*, or of the *solids*.—Oldest theory,—putrid ferment:—Dr. Lind's;—laxity of solids, and putrid *tendency* of blood:—Dr. Macbride's,—deficiency of *fixed air*:—Dr. Cullen's,—imperfect state of the *animal mixt*:—Dr. Milman's,—gradual diminution of vital power in the muscular fibre:—Dr. Beddoes's,—deficiency of oxygene in the system.

588. Examination of these,—the objections to which they are respectively liable in particular cases;—and view of the disease as arising under very different circumstances with respect to food, &c.—with general principles which embrace the several varieties of the complaint, and lead to their appropriate and effective means of cure.—Illustration of these principles by a comparison of Scurvy with Hæmorrhæa petechialis, and the particular mode in which the latter has been successfully treated.

589. The general indications are,—A. To avoid or diminish as much as possible such of the predisposing and exciting causes as are known to exist in the particular case.—The vast importance of this both in the prevention and cure of Scurvy, shewn, in the striking difference between the state of Lord Anson's and Cap-

587. A kind idea of it, being owing to luxury of the
solids is generally believed, but not that there is any
lentid ~~ferment~~ ^{thickening} in the blood. &c
Dr B. thinks with Dr Williams that it is the action of
the body that are disturbed, thus we look for it in
the mucous system.

A. Instead of Butter, he allowed them Sugar & some
Malt, for Drinks they had sweet wort, from 1 to 6
drinks daily, this is a powerful preventive of Scurvy
but of little use when the Disease is already present.

B. We must frequently find that this Disease
is dependent on disorder of the Liver, more so on that
of the digestive organs.

590. We frequently find that the secretion of the
Bile is checked, the Bile is generally consti-
pated, & the quantity of Bile is diminished, sometimes
of a high colour, at others containing some of the
red Globules, it also emits a peculiar unpleasant
odour - The vegetable Diaphoretics of the class
Sedum & Anemone are particularly useful, the best
preparations are the vegetable Preparations -
The combination of Squills & Calomel with Liquid
of Tartar is a very excellent Diuretic.

591. The Mineral Acids. Dr. has found useful in
Hæmorrhæa Petechialis, not so in Sea Scurvy.
This is a doubtful remedy. Vinegar is a powerful
preventive of the Disease. - When the Disease
exists this is brought on in consequence of the deficiency
of vegetable food, nothing is equal to fresh Lemons,
Vegetables, combined with Louis's Mineral Acids
to support the strength, and paying attention to those
organs which are deranged.

592. The best applications are put to the Aorta. Astringents
as Sulphuric Acid & Sulphur. The Cerat
Romain & Flav. Dress of Bark & where Poultices
are necessary in consequence of the hardness of the
edges those of the vegetable kind will be the best,
as the Lard. or Ferric.

tain Cooke's ships' companies, during their respective voyages round the world; with a detail of the several means employed by the latter, under the heads of—food, —drink,—clothing,—labour, — exercise,— amusement, —cleanliness,—subordination, &c.

B. To attend to, and correct, the morbid condition of particular functions and parts which take place more remarkably in some individuals than in others.

590. Observations on the functions of the Skin, Intestines, and Kidneys, in Scurvy; and on certain remedies which have been occasionally employed in aid of the general antiscorbutic plan (589), for relieving urgent symptoms, and expediting recovery;—under the heads of diaphoretics,—laxatives,—and diuretics. — Of the earth bath, and its operation.

591. Remarks on particular articles which have been proposed as adequate to the cure of Scurvy under a defect of fresh *acescent* vegetable matter:—e. gr. Mineral acids;—Nitre?—Vinegar;—sour Krout;—crystallized Citric acid;—Wort;—Spruce Beer;—sour flummery or *Sooins*,—*Quass*.—*Dried* vegetables? &c. —malted Barley, Gramm, &c. with the testimonies for and against them.

592. Remarks on the external treatment of Ulcers when occurring in actual Scurvy, or in a scorbutic diathesis.

OF DROPSY IN GENERAL

593. DEFINITION. A preternatural accumulation of serous or gelatinous fluid, in the cellular membrane, or in other cavities of the body.

594. Division of dropsy into *Genera* according to its source, with their allusive names and derivations; *e. gr.* —(1) in the cellular membrane, ANASARCA; Syn. *Sub-cutaneous*,—*interstitial*,—or *diffused dropsy*:—(2) in the cavity of the abdomen, ASCITES, or peritoneal dropsy:—(3) in one or more preternatural sacs, ENCYSTED DROPSY,—and this often *Ovarial dropsy*:—(4) in the chest—HYDROTHORAX; Sp. *Hydrops Pleuræ*,—*Hydrocardia*,—*Hydrops pulmonum*:—(5) in the head,—HYDROCEPHALUS, Sp. *H. externus*,—*H. internus*,—or, *Hydrops Meningum*, and *Hydrops Cerebri*:—(6) in the cavity of the scrotum—HYDROCELE:—(7) in a joint,—HYDARTHURUS:—(8) in the eye,—HYDROPTHALMIA:—(9) in the spinal theca,—HYDRORACHITIS, Syn. *Spina bifida*.

595. Account of the antagonist, yet allied functions of the EXHALANTS and ABSORBENTS; proving, that every dropsical complaint depends immediately upon—A LOSS OF BALANCE BETWEEN THESE TWO SETS OF VESSELS.—Enquiry how far the one, or the other, or both, be *generally* in fault; and reasons for concluding, that the morbid condition exists generally and chiefly in the EXHALANTS.

596. PREDISPOSING CAUSES. Original constitution, —sometimes general, sometimes local;—occasionally hereditary;—often marked by a lax and sluggish state of the nervous and muscular systems, with a pale doughy complexion, and tendency to corpulence,—answering to the leucophlegmatic habit of the ancients, and by them referred primarily to a morbid condition of the FLUIDS:—arguments for and against the humoral pathology of dropsy.—Bad air.—*Damp atmosphere?*

597. EXCITING CAUSES. Scanty, poor, or indiges-

595. We generally find that in addition to the
loss of balance between the exhalants & absorbents,
that the property of the fluid is altered, therefore
that can the absorbents have to do with this, but
we should certainly attribute it to an increased
secretion or action of the exhalants.



597. The Abstraction of the Glutin of the Blood
will bring on Dropsy, as it is not only that part
of it which nourishes the Body, but it also
possesses an particular property, that of
keeping the red particles & serum together, so
that when this is removed the serum will flow
off at the nearest outlet. &c.

D.B. thinks that in one hour the urine may
be so far diluted, that a Patient suffering from
Acute Urine may become comparatively easy.

The reason why Dropsy so often follows Inter-
mittent & Remittent Fevers is, that obstruction
of the Abdominal Viscera, particularly the Liver,
is often produced by these Diseases.

tible food.—Excess in the use of thin, and watery liquids: Sudden refrigeration, especially when previously overheated and fatigued:—Excessive loss of blood;—Profuse discharges of other kinds.—The operation of these several causes illustrated by striking examples, and by the experiments of Dr. Hales, and Professor Schultz:—and reasons why loss of blood more particularly induces dropsy.—Preceding diseases, especially Fevers, and Inflammations:—marked *locality* of their operation in many instances:—why Intermittents in particular, often bring on dropsy, and especially Acites.—Mechanical injuries, as blows, sprains, &c. often cause *local* hydropic effusion.

598. Suppression of natural or customary evacuations; as of Perspiration,—Urine,—Menses,—Hæmorrhoids, &c. The *mechanical* and *humoral* operation of these objected to, and their influence explained in a different way:—with reasons for believing, that they are oftener *consequences*, perhaps, than *causes*, of the morbid derangement which is succeeded by dropsy.—Depressing passions; the mode in which they bring forth the particular morbid tendency, pointed out.—Abuse of fermented and spiritous liquors: their *modus operandi*.

599. Obstruction to the free passage of the blood—alone sufficient to produce dropsy, beautifully illustrated by the expt. of Lower:—why compression of both Arteries and Veins, and even of the Arteries alone, should have the same effect,—explained in various examples, both of local and general dropsy.

600. Of the *kind* and *degree* of inflammatory action which especially terminates in hydropic effusion,—and the parts where it oftenest takes place; elucidated by cases and dissections.

601. GENERAL PROGNOSIS,—requires an extended consideration of the age, and constitution of the patient,—the variety and degree of the causes,—the symptoms and duration of the complaint,—its being simple, or complicated with other disorders.—Universally, however, the less the tone of the system is impaired, and the blood impoverished, the sooner and more completely will the disease yield to proper remedies : whilst the disease that occurs in advanced life,—in a leucophlegmatic habit,—and is brought on by intemperance,—or connected with organic disease of the heart, lungs, liver, ovarium, &c. medicine may relieve, but will seldom cure.—Women said to be oftener cured than men ; considerable exception to this :—and short persons oftener than those of large stature.—*Unfavourable signs*,—progressive wasting, —purple or livid blotches, or erysipelatous eruptions on the skin ;—foetor of the breath ;—hæmorrhage from the nose, mouth, lungs, stomach, or intestines ;—drowsiness ;—constant feverish heat and great thirst, unless these proceed from heating medicines, and abstinence from drink :—spontaneous diarrhœa without relief ;—the swelling, when reduced by medicine, returning quicker than before.—*Favourable signs*—absence of those just mentioned :—the pulse being steady, not quick, and of good strength ;—the deficient excretions, especially the Urine, and Perspiration, being sensibly increased by remedies not very powerful in their kind.—Conclusion to be drawn from the consistence, colour, &c. of the effused fluid.

OF ANASARCA, OR INTERSTITIAL DROPSY.

602. CHARACTER. Diffused swelling of a part, or of nearly the whole body, having usually the ordinary colour of the skin,—easily receiving the impression of the finger, and retaining it for some time;—shifting its situation more or less according to posture, and generally occupying the most dependant parts.

603. Division of Anasarca by Nosologists, into different Species or Varieties, according to its alledged Cause.

604. Of the parts in which it generally appears first,—its progress,—attendant symptoms,—and the modes in which it proves fatal.—Frequent difference in the quantity, colour, &c. of the urine, between this and other dropsies, and conclusions that may be drawn from it.

605. DIAGNOSIS. How distinguished from Leucophlegmatic Obesity, and from Emphysema.

606. PROGNOSIS. Anasarca when consequent upon Ascites or Hydrothorax, follows the event of the *primary* disease; but if *idiopathic* itself, is commonly obstinate, unless where it succeeds to Scarlatina. Has occasionally been removed by fever supervening; and in a few instances by spontaneous oozing through the pores of the skin.

607. Some account of the BERIBERI, an acute and destructive disease, almost peculiar to the East Indies,—attacking more especially the Sepoys and Lascars,—presenting a singular combination of spasmodic, hydropic, and paralytic symptoms,—and occasionally those of

Scurvy also : with conjectures respecting its cause, and suggestions for its treatment.

608. Description of a particular species of *Œdema* attendant upon Hepatic disease, occasionally observed in this country, but unnoticed by authors.

OF ABDOMINAL DROPSY.

609. Division of this into *Ascites*, or *Peritoneal Dropsy*—and *Encysted Abdominal Dropsy*.

610. CHARACTER OF ASCITES. A uniform, tense, and nearly inelastic swelling of the belly, accompanied with fluctuation.

611. Symptoms generally ascertaining ENCYSTED ABDOMINAL DROPSY;—the swelling in the latter being at first local,—often attended with pain;—fluctuation being obscure or altogether imperceptible;—dragging uneasiness on turning in bed, &c.

612. Of the parts in which hydropic cysts most commonly occur;—their different structures in different instances;—Proofs of the animalcular nature of hydatids (*Tenia hydatigena*, LIN.): and difficulty of accounting for their presence in the living body.—Why encysted dropsy more frequent in women than in men:—why generally fatal at last; and why more slowly so than the other forms of dropsy.

613. Under what circumstances *Ascites* and *Anasarca* are simultaneous or successive.—Modes in which *Ascites* and *Encysted dropsy* respectively destroy life.

614. Of the delicacy and difficulty which occasionally attend the diagnosis between *Abdominal Dropsy* and *Pregnancy*: and of the marks which serve to distinguish

616. If Difficulty of Breathing is produced immediately
on exposure to Cold you must generally consider that
the Patient labours under Dry Pleurisy.

them.—Fatal effects from mistaking enlarged Liver, Spleen or Kidney for Ascites, and performing the operation of paracentesis.

OF HYDROTHORAX.

615. SYMPTOMS which usually attend it;—shortness of breath;—paleness or purple hue of the face;—difficulty of lying in a recumbent posture;—frequent, sudden, and spontaneous starting up from sleep, with sense of suffocation, and palpitation of the heart;—paucity of urine;—œdematous swelling of the lower extremities.

616. DIAGNOSIS. Difficulty of determining the existence of Hydrothorax in general; and still more the particular part in which the fluid is collected: necessity for this purpose, of minutely investigating its rise and progress,—the preceding as well as accompanying symptoms,—and the collateral circumstances of constitution, age, habits of life, &c.

617. Method recommended by Hippocrates for detecting water in the chest;—deception to which it is liable, illustrated by a case:—and danger which may attend the trial. Test proposed by Avenbrugger; and its improbability shewn.

618. THE PROGNOSIS IN HYDROTHORAX generally unfavourable, and why:—instances, however, in which a partial or complete recovery took place, under the most unpromising symptoms.

OF CHRONIC HYDROCEPHALUS.

619. Division of Hydrocephalus into two distinct and widely different forms of disease, viz. the *acute* and *chronic*.—Reasons for considering only the latter under the general head of Dropsy, and for treating of the other separately.

620. CHARACTER. Obvious and uniform enlargement of the cranial vault in young children, with defective ossification of the bones, and consequent openness at the sutures.

621. The disease usually connate, perhaps congenitate. Examples of it in the early foetal state.—Progress of the complaint, and the effects it produces.

622. Appearances on dissection;—and difference between the seat of this, and of a species of Hydrocephalus often terminating the life of insane adults.

623. THE PROGNOSIS. Why *universally* unfavourable.

* * *

624. *Hydrocele, Hydrorachitis, and Hydrophthalmia*, as falling almost exclusively under the Surgeon's management, referred to another place.

GENERAL CURE OF DROPSY.

625. The indications are—A. To remove the effused fluid;—B. To obviate the causes which gave rise to it;—C. To prevent a return of the disease.

626. The fluid may be removed either *indirectly*, through the natural excretories of the body, as the Stomach, Intestines, Kidneys, and Skin, by means of their

22. We generally find that there is effusion into
the Cisterns of the Brain & usually distended, &c.
as seen an instance where it was not thicker than
Membrane.

27. In the commencement, when it is not owing
any fixed cause as disease in any of the viscera,
it is said to be proper, but not if there is much
difficulty of breathing or determination to the head.
Mustard is a very good remedy.

626 It is generally considered as a doubtful remedy, & is usually condemned, where it is caused by the deficiency of circulation & weakness of the Exhalants it certainly would be improper. but when it commences with increase of circulation marked by a quick & hard Pulse, & it arises from exposure to Cold when overheated by exercise, it will be extremely necessary and will be found to relieve the symptoms, but it must be employed with caution.

628 If you wish to evacuate Bile, Scammon & Calomel is the best Purgative. Potassium is more active than Jalap, but it ruffles the system too much, the best way of giving it, is ʒij of it rubbed down with ʒij of the crystals of Tartar & in 6 hours. A very good combination as an occasional Purgative is ʒij of the crystals of Tartar & six grs of Calomel. the former may also be taken largely diluted with water per Potus ordinarius. A broad Belt shd be worn & drawn tight as the fluid is removed by Purgings.

629. When there is much scorrick heat, Urine and the Salivary Discharges will be proper, but when there is much coldness, & therefore the stimulating kind, as horseradish &c. A combination of ʒiij of crystals of Tartar given in the above Colander & ʒij of the same found extremely useful in obstinate forms. Digitalis like Tobacco succeeds best in the Hydropic Diathesis, or when it is producing relaxation of the Exhalants, it is not necessary for it to excite the Urine & produce its Diuretic effect. but it will be sufficient to give a dose about twice a day. When there is a deficiency of Bile then Kali with Infus. huff. will be proper the best & supplying the place of Bile & the former correcting Acidity.

corresponding evacuants, viz. Emetics,—Cathartics,—Diuretics, and—Diaphoretics; —or *directly*, through new outlets produced by Punctures, Blisters, &c.

627. EMETICS; their great antiquity in the treatment of dropsy;—drastic ones much used by Sydenham;—uncertainty of them.—In what cases they are indicated;—in what dangerous.—Choice of the kinds adapted to the particular case.

628. CATHARTICS; are among the most powerful anti-hydropsics:—their use *generally* proportioned to the quantity of fluid discharged. Why more effectual in Ascites, and less so in Hydrothorax, than in other kinds of dropsy.—Rules for their management.—Individual articles.—Pulv. Jalapii Comp.—Pulv. Scam. cum Calomelane.—Gambogium.—Elaterium.—Pil. Nitratis Argenti?—Saline Cathartics,—Supertartras Potassæ.

629. DIURETICS, generally indicated, but often disappoint expectation, and of themselves rarely adequate to a cure.—Accurate comparison of their powers much wanted.—The kinds indicated under certain circumstances.—Particular articles;—Squills, and its combinations:—Colchicum; its uncertainty and frequent failure,—Lactuca Virosa,—testimony of Collin and Stoll in favour of it;—probable mode in which it operates.—Bacher's Pills.—Cuprum Ammoniatum, et Sulphas Cupri.—Nicotiana;—difficulty attending the rationale of its operation.—Digitalis; striking opposition of testimony respecting it;—attempt to explain its diuretic effect upon a new principle:—management necessary to render it safe.—Opium? occasionally operates as a diuretic.—Diluted acids, and mild saline neutrals;—Nitre,—Acetas Potassæ, &c.—*Stimulant Diuretics*; Tinct. Cantharidis,—doubts and cautions respecting its em-

ployment.—Infus. Sinapeos, Armoraciæ, et Dauci Sylv.—Decoct. Petroselini, cacuminis Genistæ, folior. Cynaræ, &c.—Turpentine and Balsams,—Cerevisia Pini,—Aq. Picis ;—Æthers, &c.

630. **DILUENTS.** Abstinence from liquids long strenuously inculcated ;—discovery of its bad consequences, and great benefit of an opposite plan shewn both from principles and facts.—Kinds of diluents suited to particular cases.

631. **DIAPHORETICS.** The skin a copious outlet of watery fluid ;—its function very generally impaired, and difficultly restored in dropsy. Why diaphoresis most useful when indirectly obtained.—In what cases especially indicated.—Cautions against forcing it, as the ancients attempted to do.—Means,—Baln. tepid.—Pulv. Ipec. Comp.—Vinum Antim. Opiatum,—Liq : Ammoniæ Acetatis, &c.—Methods of exciting local diaphoresis,—Vapour bath,—Oiled Silk,—Cabbage Leaves, &c.

632. The quantity of discharge by **EXPECTORANTS** too small to encourage their use for the purpose of evacuating through the lungs.

633. **FRICTION**,—anciently much employed ; why perhaps too much neglected now :—Testimonies in its favour.—Its operation explained :—adjuvants to it.

634. **ELECTRICITY**,—a powerful excitant of Nervous and of Vascular action. In what cases likely to prove serviceable ;—in what useless or hurtful.—Modes of it suited to different cases.

635. **MERCURY.** The universal operation of this remedy shewn ; and the variety of indications which it is capable of fulfilling, pointed out and explained.—The cases in which it is more especially beneficial, and the proper management of it.

32. The best remedy of this Clap is Squile.

33. It is in few cases that we should say Iuction was sufficient. If it is to be useful it should be frequently repeated. In Dropsy in Anasarca where there is obstruction to the return of blood to the pressure from below upwards will favour it. ^{80.} Saffron and Oil of Turpentine will be the best adjuvants. 86.

34. In Anasarca it should be used on as to excite shocks in distant parts of the body at the same time. In Ascites it may be employed. We cannot hope for any advantage from it in anasarca Dropsy until the Pleura is evacuated.

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636. If it is to be useful it should be employed early.
In Hydrothorax it is useless, not so in Anasarca, it is
astonishing the quantity of fluid that escapes from a
few punctures in the cellular membrane and the relief
afforded, but this again various Inflammⁿ is very liable to
ensue from punctures, the farther we go from the Heart
the greater will be the danger. R. B.

Paracentesis should be employed in Pleurisy when the Breathing
becomes affected and the foregoing Remedies have been used
ineffectually. When a Patient is very much exhausted it
will be useless any to give him a small quantity of any stim-
ulants. This is the reason why Paracentesis should not
be employed on one side of the Chest. We should begin
puncturing a little below the swelling and go on if fluid
accumulates lower, when Inflammⁿ takes place the dischar-
ge will stop, we must then have recourse to Tonic.

637. A more gentle way of procuring a discharge is by
capping the limbs in flannel, over which Diluents is
applied, this acts as a vapour Bath, the flannel induc-
ing perspiration and the Dil. Silk confining it.

639. By combining Alkalies with Tonics we shall not only
keep up the tone of the system, but also produce a discharge.
In weakly constitutions we are obliged to have recourse to
stimulants, such as this stimulating Diaphoretic joined
with the simple Pictives.

636. DIRECT METHOD OF REMOVING THE EFFUSED FLUID (625);—Paracentesis in Ascites;—its early use often injurious; mischief on the other hand from postponing it too long:—under what circumstances it should be had recourse to. Management necessary during and after the operation. Doubts respecting its employment in hydrothorax:—why inadmissible in hydrocephalus.—Dangerous proposal of injecting liquids into the thoracic or peritoneal cavities.—Puncturing in Anasarca;—necessary cautions respecting the part, the mode, and the circumstances of the case, in which it is performed, so as to avoid inflammation or gangrene.

637. BLISTERS, OR EPISPASTICS;—the discharge by them often very great without vesication, and always stopped when inflammation supervenes:—application of this to regulate the mode of using them.

638. To fulfil the second indication (B. 625), not only necessary to avoid or diminish such of the external exciting causes as may still continue to operate, but also accurately to investigate the internal cause or causes immediately occasioning the loss of balance between exhalation and absorption; *e. gr.*—(a.) general debility operating more especially upon the Exhalent vessels;—(b.) weak inflammatory action (600);—(c.) obstruction, from congestion of blood, from torpor, or from change of structure, in any considerable viscus, as lungs, liver, spleen, &c.

639. Means adapted to (a.)—Tonics of various kinds, particularly the simple bitters, variously combined with alkalies, acids, stimulants, chalybeates, &c. accordingly as the circumstances of the case may require.

640. Means suited to (b.) and (c.);—blisters;—Mer-

cury, combined with Opiates, and Antimonials;—Cicutæ,—Extr. Taraxici? &c.

641. Remarks upon the general treatment of dropsy;—the diet and regimen suited to the circumstances of the case;—and the means likely to prevent a recurrence of the disease.

642. A due attention to the principles delivered above, will readily point out the particular means especially adapted to the individual kind (594) or species of dropsy.

OF ACUTE HYDROCEPHALUS.

643. Reasons for considering this disease separately and particularly.

644. SYN. *Hydrocephalus internus*, WHYTT;—*Apoplexia Hydrocephalica*, CULL.—*Hydrocephalus acutus*, QUIN.—*Phrenicula*, RUSH.—*Hydrocephalitis*?

645. CHARACTER. Anorexia, — lassitude, — heaviness, and pain of the head, and intolerance of light, — accompanied with febricula, costiveness, and vomiting, — and followed by unusual slowness of pulse, — dilatation of the pupils, — strabismus, and restless somnolency, or stupor: chiefly attacking persons under puberty, and more especially children.

646. Particular detail of the mode in which the disease usually commences and proceeds, — and occasional variety in the number, — order, — degree, — and duration of the symptoms, — according to the age, constitution, &c. of the patient; — reconciling the dissimilitude of individual narratives, and accounting for the opposite ideas of those authors who have framed a general character from a few cases, or adopted theories respecting its nature and proper mode of treatment in the *early* and perhaps

40. Local Bleeding is the only means we can have recourse to in inducing inflammation; the application of Blisters to be found most useful: L.B. will sometimes only be advantageous when followed by small doses of Mercury combined with Diaphoretics, as the Pil. Scilla Comp. When we wish to produce the Diuretic effect of Iodine we must give the fresh juice, therefore in the form of Decoction. Dr. C. has not found it particularly advantageous.

Umbellata has been lately introduced, it will be useful substitute when the Iodine is indicated.

43. As it is generally following acute Inflammation.

46. It is more or less acute according to the Degree of Inflammation of the Gallium: If the Intestines are not formed the symptoms are very rapid in their progress. We generally find that there is obstinate constipation. It is commonly accompanied with more disorder of the biliary system, than any other disease, except that of the organ itself.

46 In this Disease we often find the Excreta
of greenish colour, resembling spruce or Larch,
sometimes amounting to Cluckers, & a partic-
ularly fatted odour and as tenacious as bird Lard
but it must be remembered that you may
produce the same appearance in the Excreta
of a healthy Child by the exhibition of a dose
of Calomel.

647 In the first, you have the congestion
of the lungs and sometimes, in the second
the increasing great difficulty of breathing &c.
and in third, increased quickness of the
Pulse, alternate chills & colligations
sweats &c. &c.

In the 2nd stage the pulse is remarkably slow, there is
opisthotonus & the eyes are severely convulsed & high.
in the 3rd difficulty of breathing resembling the apoplectic
in later. &c.

648 D. B. has found on taking off the skull
cap, transparency of the vessels of the brain & matter
and sometimes a deposit of fibrillations, sub-
stance on the membranes, but no thickening of
them. A post-mortem accumulation of
serum in the cavity of the ventricles, varying
considerably in quantity, sometimes only
an ounce or others so much as to distend the
ventricles exceedingly, also increased vascularity
of the medulla oblongata, a deposit of coagu-
lable lymph on it and frequently the colour
of this part altered. The character of the serum
collected in the ventricles differing from common
serum - in no other respect but not coagulating
by heat.

D. C. has found the Brain firmer than usual.



only curable stage, from the manner in which the disorder fatally *terminates*.

647. Striking changes of symptoms in the progress of the complaint, dividing it into *three* distinct stages,—1st, of *irritation*,—2dly, of *oppression*,—and 3dly, of *ineffectual reaction*.

648. Account of the morbid appearances after death, explaining the circumstances of par. 647 ;—with strictures on the propriety of the different names (644) that have been given to the disease ; and a new one offered:

PARAPHRENITIS HYDROCEPHALICA.

649. PREDISPOSING CAUSES;—A peculiarity of constitution, evidently allied to scrophula,—often hereditary,—and usually marked by irritable and delicate frame of body, acuteness of intellect, and liveliness of disposition,—and sometimes by a peculiar form of the head : — Imperfect convalescence from Scarlatina, Measles, Small Pox, Whooping Cough, &c.

650. OCCASIONAL OR EXCITING CAUSES,—whatever can produce considerable pyrexia of the inflammatory kind, in children predisposed to the disease, *e. gr.* sudden refrigeration ;—the irritation of teething, and of worms, especially if attended with convulsions.—Bilious vomiting and purging suddenly checked.—Disease of the brain itself, from blows, falls, &c. or from scrophulous or other tumours formed within its substance.—Other causes alledged, but less obvious in their operation, *e. gr.* suppression, or spontaneous metastasis, of Tinea Capitis, and of other eruptions,—healing of old ulcers, issues, &c.

651. OF THE PROXIMATE CAUSE. General view of the disease, and comparison of it with Phrenitis in adults (300),—leading to the conclusion (supported by

the means of cure acknowledged to be the most effectual), that the affection of the brain, though the immediate cause of death where the case ends fatally, is yet, in general, only A CONSEQUENCE OF INFLAMMATORY IRRITATION; | WITH DIMINISHED OR ALTERED FUNCTION, OF THE LIVER.

652. DIAGNOSIS. Difficulty of distinguishing this disease in its early stage, from the febrile state occasioned by Dentition or by Worms,—owing to their having many symptoms in common :—circumstances in which they agree ;—others in which they differ ; and importance of a timely discrimination to the safety of the patient.

653. PROGNOSIS,—even in the FIRST stage (647) *doubtful* ;—in the SECOND *very unfavourable* ;—and in the THIRD *uniformly hopeless*. * Particular circumstances denoting one or the other of these.

654. TREATMENT. — This, to give a tolerable chance of success, must be decisive,—be entered upon early,—and pursued with vigour. The chief indications are—

A. To diminish the inflammatory action of the brain directly, by venesection, leeches, cupping, blisters, and digitalis,—according as the symptoms are urgent, and as the case partakes most of the *tonic* or *atonic* form.

B. To take off congestion or irritation from the Hepatic system, by the use of purgatives, but especially by the employment of MERCURY, so as to empty that organ, and to restore its free secretion and excretion.

C. To aid these (A and B) by the use of—Opiates, —Antacids,—Diaphoretics,—Diuretics?—&c. &c.—Directions for the management of these means respectively.

*Dr. Blister. be applied, it should be after
Dr. Lot. be have been employed: Dr. L. has
has found great benefit to arise from
them but Dr. B. says he has known them pro-
duce great mischief. but if they are use-
ful at all it is when effusion has taken
place into the ventricles.*

51 Dr. Babi ad mites, that the liver is affected, but cannot be considered as the primary cause of the Disease nor effect of it.

In the Fever to which Children are particularly liable you will have that peculiar affection of the Head which is found in pure Acute Hydrocephalus, so much so as to make us ^{hesitate} ~~conclude~~ in our decisions; but if the Fever is generally found that a dose of any mercurial laxative will remove it. When we find the Head extremely acute, and coming on in a young person may generally conclude that it is symptomatic of some other organic affection.

3 x Dr. B. is not disposed to admit this, as he has seen the very worst cases recover.

54. U. If you are called in at the commencement and on enquiring into the state of the case you find it one of pure Hydrocephalus: and your Patient is of Phlogistic Diathesis, you should treat it the same as common Inflammation.

The quantity of blood to be taken away must be regulated by the age, sex, and state of the Patient. I have I speak by Leeches. If a Child? by Cupping Glasses to the nape of the neck. If a still more advanced period, and suppose it to be a Patient of greater constitutional power, draw blood from the arm to the amount of 3x - xij or even more.

3. We consider this as one of the most important indications in the case and what we greatly rely on. The best form of Mercury is Calomel and if it be not sufficiently powerful ^{as a Purgative} you must add some cummery or Cam boja until the Bowels are fully opened. To take off the congestion in the Head, Cold Affusions will be useful, also the application of cold evaporating lotions, or Ice, if it cannot be procured tincture of Colic in Water with the addition of crude sal Ammoniac may be substituted. R. Citric. ℥ij: Amm. of Ammonia. ℥ij. Water of Pepp. ℥ij. for an Evap. lotion. R. Sulph. Atthor ℥ij. or 3ij. Rose Water ℥ij. - or this mix of Water. R. of Sph. R. of Sulph. Atthor. ℥ij.

In addition to employing Mercury as a Purgative it may be given in combination with Sal Soda to act on the system: this practice was first tried by Dr Percival & has been generally followed. When water is collected in the ventricle it has not only been given in doses of 2.3. or 4 grs every four hours but the Merc.^l Antimonial has been applied to blistered surfaces to produce its effects more speedily.

If you consider this complaint of the Appear. Char. sanctus Digitalis appears to be the best remedy which will be particularly applicable, especially if the Patient be of a delicate habit; to a Cl^d of 7 yrs you may begin with 4 grs and gradually increase it.

To relieve the restlessness and Dis-^{tr}ess in the latter stages of the Disease, no remedy produces so much good an effect as Opium, even very little. Dr Wms & B has found advantageous, as the main part of a Dose of Syrup of Poppies, has quieted the Patient in 5 Minutes.

A. It has been proposed lately to open the Jugular vein and Blood can be more readily procured than from the Arm. Dr C. proposes applying Blister to the nape of the neck and extend up around to the back of the Head, and Cold water constantly to the Top of the Head. Dr Wms would prefer having recourse to active Purge rather than wait for the more slow action of Digitalis & Diuretics.

B. When connected with vomiting and purging of Green Bile (alone) may be given alone to keep up an action on the Bowels, but not purging, or may be combined with something to prevent this. In the 2^d stage Mercury may be given to act on the system joined with Opium & Diaphoretics.

C. The warm Bath has been frequently recommended, it will always stimulate and produce a copious perspiration, it may be combined with the remedies mentioned in the early stage of the Disease. —

Opium can only be necessary, when there is a considerable degree of Irritation, as a Palliative in conjunction with other remedies, or to check the too speedy operation of Mercury when exhibited as an alterative.

(58) The Gastric juice possesses such antiseptic
properties, that it has been employed by some Gastro-
intestinal Surgeons as an application to the eroded
and ulcers to cleanse them and thereby induce a
healthy appearance.

655. Consideration of the proposal to evacuate the effused fluid by puncture; and the necessary fatality of it demonstrated.

OF DYSPEPSIA, OR INDIGESTION.

656. SYN. *Bradypepsia*,—*Diaphthora*,—*Apepsia*.

657. Vast importance of the stomach shewn, as—the laboratory of nourishment,—the great center of Sympathy,—and the prolific source of multiform disease.

658. Short sketch of the functions of the stomach in its healthy state,—with reference to the Lectures on Physiology for a fuller exposition.—Periodical recurrence of appetite or hunger differently accounted for;—is probably a compound sensation.—Processes which the food successively undergoes—of Mastication and Deglutition;—Solution and Conversion in the Stomach; extrusion thence in the form of Chyme;—junction with the Bile and Pancreatic Liquor;—formation of Chyle, and its absorption by the lacteals.—General remarks on the best established theory of digestion;—on the qualities of the Gastric Liquor,—the appropriate food of different classes of animals,—the omnivorous nature of MAN,—the influence of habit with respect to food,—and the remarkable cravings and antipathies of individuals.

659. GENERAL CHARACTER. Irregular, but commonly deficient appetite;—occasional craving, without relish in satisfying it;—apepsia, loathing;—nausea, and sometimes vomiting;—sense of load and distension after meals, followed by eructations of air, &c.—acid, nidorous, pungent, or insipid.—Mouth and fauces generally

dry, and tongue white, or yellow.—Bowels generally irregular, oftenest costive, sometimes lax, or each by turns.

660. The above symptoms, accompanied with a host of others termed *Nervous*, infinitely varied in individuals, and often more distressing than the primary ones ; *e. gr.* headache,—flying pains,—noise in the ears,—giddiness, temporary absence of mind,—impaired memory ;—unrefreshing sleep,—terrific dreams,—unusual timidity,—despondency of mind ;—in a word, with all the train of complaints marking Hysteria and Hypochondriasis, as they appear in their respective constitutions.

661. Remarks on several of the symptoms (659), and on the exterior marks of constitution or habit of those persons, in whom particular ones more especially occur.

662. PREDISPOSING CAUSE ;—original constitution ;—sometimes apparent only in defective function of the Stomach itself, at others evidently connected with want of Tone and Vigour of the body at large.

663. EXCITING CAUSES ;—these divisible into *two* kinds, viz.—A. such as operate directly on the Stomach,—and—B. such as affect it through the medium of the general system.—A. Want of due mastication, and commixture of food with the saliva ;—proofs and illustration of this, and remarks on the antizymic property of the saliva.—Food either in itself difficult of digestion, or so with respect to the individual ;—over-distension of stomach from excess in the quantity of food or drink ;—compression of the stomach from posture, &c.—violent exercise or succussion of the body after a full meal,—illustrated by ingenious experiment of professor Harwood of Cambridge :—abuse of acid and acescent articles of food,—and of stimulating condiments, or spi-

661 In Persons of light hair, fair complexion,
and delicate habit, the char. of the food is rather
acid character. Those of a Plethoric Habit & the
alkaline character, & the excretion from the St.
much resembles rotten Eggs in taste, while in
the Scorpid and Leucophlegmatic Habit the
bowels are generally constipated. &c.

In Persons of a melancholic temperament, it is very
difficult to distinguish between a severe fit of Dyspepsia
and Hypochondriasis.



555 If Symptomatic Indigestion you have a
familiar instance in Gout, and this is so
common an affection that you look to this
as the diagnosis between Gout & Rheumatism
again in Nephritic Affections, as soon as the
Patient becomes sensible of any local complaint
have the dyspeptic symptoms; therefore
before you look to the removal of the derange-
ment of the Stomach you must remove the
Nephritic Affection by &c. the Warm Bath,
Exercitation &c. &c.

Often connected with cutaneous affections which on
being checked you have chronic Dyspepsia brought
on.

ritous liquors ;—frequent and copious use of warm diluents :—certain articles of the narcotic kind, *e. gr.* Tobacco,—Tea,—Opium,—Bitters, &c.—B. Sedentary inactive life ;—cold damp atmosphere ;—grief, anxiety, and other passions and affections of the mind ;—intense application to study or business ; *Venus immodica*.—Examples of the effects of these several agents (662-3) in individuals,—in particular occupations,—and in certain classes of men.

664. The Stomach, from its extensive sympathy, often a partaker of morbid irritation communicated from other organs ; when it frequently displays symptoms so violent, and apparently so confined to itself, as to make the *primary* and *proper source* be altogether overlooked.—Instances of this in the successful treatment of seemingly Idiopathic Dyspepsia, by remedies which manifestly and chiefly operate upon other organs, and exert little or no immediate beneficial influence upon the Stomach.

665. PROXIMATE CAUSE OF IDIOPATHIC DYSPEPSIA. A defect in the quantity or quality of the gastric fluid, the consequence of impaired secretory function of the stomach ; but probably commensurate with the state of its tone and vigour as a *muscular* organ.

666. TREATMENT. Importance of previously ascertaining whether the dyspepsia be constitutional or acquired—whether idiopathic or symptomatic,—whether arising merely from errors in diet, or other extrinsic agents,—or, owing to a morbid state of the Stomach independently of these.

667. The principal indications are,—1st, To avoid, remove, or as far as may be, duly regulate, those things

enumerated as exciting causes (663).—2dly, To relieve urgent symptoms,—as cardialgia,—acidity,—costiveness, or purging,—and pain.—3dly, Improving the vigour of the stomach, and of the system at large.

668. FIRST INDICATION.—Difficulty of accomplishing it in many cases,—sometimes from the circumstances of the patient, but often from the force of inveterate habits.—Allowance necessary, (under certain restrictions) for custom and constitutional peculiarities in regard to articles of food.—General indications as to the proper *kind* of food,—drawn from the obvious prevailing state of the stomach, e. gr. acid,—nidorous,—pituitous;—and from the exterior character of the patient.—Regulation as to *quantity*;—abuse of the common precept of *eating little and often*, pointed out and explained.—Directions with regard to *dilution*, or the taking in of liquids.

669. SECOND INDICATION.—Means of fulfilling it.—Cardialgia the effect of opposite chemical qualities of the gastric contents, viz. septic,—acid,—rancid;—respectively relieved by—acids,—alkalies:—choice of the first,—Sulphuric, Nitrous, and Muriatic Acids,—native Vegetable Acids,—Carbonic Acid Gas;—of the second,—Soda,—Potassa,—Ammonia,—Magnesia,—Chalk,—Lime Water;—according to the circumstances of the case.—*Obviating costiveness*;—the milder cathartics most suitable; choice of these according to circumstances. Bile the natural tonic and laxative;—indication of increasing its quantity when deficient, and correcting its quality when depraved,—how best fulfilled.

670. Why emptying the stomach by Emetics seldom required; and why their frequent use injurious:—under

by In Warm weather the Saline Purg.
appears to be particularly useful the
Cheltenham Water is one of the best.
It must not be taken so often as to wear
the tone of the stomach.
When the Patient is bilious: Rhine, ginger
peppermint, Pil. gall. f. c. Aloes. V. c. Aloes
tincture. V. c. Aloes. St. Ann. Purgative.

*A Bowel costiveness,
in young men, is
relaxed Chalk*

*a purgative of
Pul. Rhine
Sal. Soda.*

*by giving a few
grs of Calomel
dissolved in the
juice of a
gentle Purgative.*

668 Dr B. thinks that aliment should be taken,
while awake, once in 4 or 6 hours, otherwise
the Gastric Juice will be secreted in too large
a quantity, while on the other hand if it be
taken too often you overload the Stomach, and
the fresh nourishment will be collected before
that which was previously taken has undergone
the proper change by the action of this fluid.

669 If the Bowels are costive and the evacuations
noxious, than relief will be afforded by
Purgings. In a case of Acidity. Antacids.
Magnesia, either the Sulph: or Saline P.
or the Carb. or Vest. These differing in their
strength. if the Carb. is the preparation
is more bulky, while if you use the Vest.
wish to have it concentrated use the Vest.
the Operation of this remedy must depend
on the Degree of Acidity in the Stomach.
Under the same head may be placed the
aq: Pulvis, the Alkaline prepar: as the am.
which also acts by stimulating the Stomach
increasing its contractility, also Soda & Potash
sometimes we use the Caustic Alkal: as Liq Potash
in some Diluent / more frequently use the
Carbonates, we may give R ij ss for a Dose, occa-
sionally ss , Dr B. does not think this an unsafe
Dose, he has taken in a Dose, ss of the Subcarb: of Potash
to ascertain the effect produced on the Urine, he
found that it completely changed & rendered so
alkaline as to decompose Muric of Ammonia.

637 The next thing to mention is the use of
emetics. I have often seen a patient
who has been vomiting his
food and is weak, the Doctor has
told him that the chief to be avoided is to the
stomach gives to the heart. It is of the
stomach to contract, rather than get it
into the. The case continues. I have seen a
case of a patient with a mountain fever, may be
some remedies. But as you want the use of
vomiting and not secured to be the effect, you
will prefer the Opium either in Powder or Wine
or the Blue or White or those to the preparations
of the Liniment.

638 These will often give relief, more especially
to those whose Stomachs have become weak
from Indulgence in Eating, or from the Abuse
of Spirituous. Dr. B. recommends Infus. Gent.
with some preparations of Opium.
By Infus. Gent. ℥ij - 3j. With Opium ʒij - ʒij. Ag.
cinnamon. ʒij. Warm Liniment 3j - 3ij. And Hot.
To those who have made too great use of Opium
he has found the combination of Opium & Ext.
Gent. ʒij & Oil is afforded great relief.

639 But when bilious are given too often they cause
a moderate and good effect.

^{The Case of the}
^{Dr. B.} 640 Dr. B. does not think Liniment equal to or so
beneficial as the simple Bilious. If it begins
the Yellow Bile will be employed as being the
most bitter which we possess.

641 When the Stomach has got into a state of
obility then the Choleliths will be most
useful.

642 When the Patient has not been in the Habit
of going out of Doors we must employ Friction
but if he has been accustomed to mild Sports
the Friction will do him spiritual
service. The Temperature must be kept up
either by Exercise or Friction.

643 In Ireland & Scotland, & thus we believe
in a peculiarly of Diet, it being chiefly
of Potatoes & Calves which has a great tendency
to relax the Stomach.

644 A better regulation of Diet & Attention to the
state of the Bowels.

645 The use of Opium with Liniment is not so successful.
Dr. B. has seen a patient with Pains for a fortnight
and it relieved the Patient. American joined with
honey will be a useful Palliative and ^{will} act on the
Bowel.

what circumstances they may be employed,—and the kinds most proper.

671. Removal of pain obtained—sometimes by the means noticed above (669),—occasionally by Aromatics and other stimulants,—most effectually by Opiates:—choice and management of these respectively.

672. THIRD INDICATION (667);—why often limited in this.—Tonic remedies;—why simple astringents but little tonic,—and why Cinchona less so here than Aromatic or Simple Bitters. The *modus operandi* of Simple Bitters, and cautions requisite in their use (416).—Chalybeates not often serviceable, and why:—when indicated.—Directions for the choice, and combination of these remedies.

673. Of the kinds of Exercise most suitable to dyspeptics;—of Friction:—of Amusement and relaxation of mind.—The temperature of the body variable in dyspepsia,—oftenest defective:—regulation of Clothing.—Of Bathing;—its frequent misapplication,—and directions for its use.

* * *

674. Observations on a peculiar species of Dyspepsia; the *Cardialgia sputatoria* of Linnæus,—the *Pyrosis* of Cullen,—in Scotland termed the *Water-brash*;—appropriate name GASTRODYNIA SPUTATORIA.

675. CHARACTER. Sudden and violent attack of pain at the stomach, with copious discharge of colourless, insipid, and generally cold fluid, resembling saliva, from the mouth, fauces, and œsophagus.

676. Particularly frequent in certain countries;—remarks on the condition in life,—the food, &c. of those whom it chiefly affects.

677. Probable nature and cause of the disease.—Re-

medies most effectual in relieving the fit, and preventing its recurrence: — Opiates, — Ammonia, — Æther; — Tinct. Guaiei, — Aqua Picis, — Stimulant plasters; — change of diet.

* * *

678. SCIRRHOUS PYLORUS often mistaken for ordinary Dyspepsia; and Hepatic Disease for both. Importance of an early discrimination between them, — and circumstances which will tend to this, in — the age, and exterior character of the patient, — the seat of the pain, — state of the appetite, — sensations after eating, — vomiting of the food, — state of the bowels, — progressive increase of symptoms, — marasmus, &c. —

679. Observations on the remedies commonly employed: — Cicuta: — Mercury; — Opium; — Extr. Hyoscyami; — Blisters, Setons: — Tepid Bath. — Of the food most proper.

OF JAUNDICE.

680. SYN. *Ικτερος*, *Græc.* — Icterus: — Aurigo; — Morbus Regius, vel arquatus, vel arcuatus, *Lat.* — Jau-nisse, *Fr.*

681. CHARACTER. Yellowness taking place over the whole surface of the body, — but first and most conspicuously in the eyes, and roots of the nails; — Urine thick, of a deep yellowish brown colour, and tingeing white substances immersed in it of a yellow hue; — bowels generally costive, but sometimes loose, — with clay-coloured, or unusually pale stools; — languor, lassitude, drowsiness, — itching of the skin; — altered, and generally impaired, appetite.

682. Detailed description of the commencement and progress of the disease; — and variations occasionally

678 All we can do is to endeavour to relieve the
Patient. But I do not think that it is im-
possible to effect a cure.

The Distinction between this Disease & Dyspepsia is, that almost as soon as the Patient takes
the Food into the Stomach he feels Pain and
is not relieved until it passes thro' it is
returned.

679 To produce Evacuations give either Calomel.
or Coloc. of Magnesia, or a laxative Diges-
tion and Opium by the Mouth. To relieve
the Pain at the Stomach apply either Pu. Pi.
Pis, Camomile, Cataplast. Sinap. or a Camomile
Poultice. Give also Calomel. Magnesia
subcarb. of Soda with vit. Syd. which will
correct the Acidity of the Stomach, this is
to be repeated according to the Effect it produces.

678 The function of the Eye will be clear and healthy. It is generally occurring in old Persons, and in those who have been subject to considerable Stomach-
disarrangement, and the Bowels are obstinately
costive.

679. Mercury has generally produced a more rapid
determination. The Puladana ^{is rapidly purgative} is preferable to Ipecac.
In an early stage of the Disease small doses of Mercury
with Puladana has frequently produced a cure. The
warm Bath will greatly assist, afterwards it will be
only useful as a Palliative, when we must support
the Patient with nutritive Symples.

682. Sometimes it is connected with Pyrexia, at other
not; when connected with the passing of Biliary Calculi
the respiration is affected, when with the rupture of the liver
the Pulse will be hard and full, skin hot and dry, when
with obstruction of the Ducts the Pulse slows then eventu-
ally. The Intestines are sometimes troubled with a
teasing diarrhoea, sometimes the Food passes off undiges-
ted, or the stools are clay coloured. sometimes we find a
capillary eruption on various parts of the body.

observed in the state of the pulse,—respiration, stomach, intestines, skin, &c. according to the constitution and previous health of the patient, and the nature of the exciting cause.

683. Distinction of Jaundice into—idiopathic and symptomatic;—into continued, and periodical or recurrent,—into febrile, and non-febrile;—into yellow, and black (*Icterus*, and *Melasicterus* of authors.)

684. EXCITING CAUSES. Compression of the biliary ducts, particularly the *ductus communis*,—by posture,—by advanced pregnancy;—by tumours of neighbouring parts, *e. gr.* steatomatous Omentum,—scirrhus Pancreas, &c.—partial inflammation affecting the larger ducts;—scirrhus,—ossific deposit?—or tubercles in the liver;—inspissated bile;—biliary concretions:—lumbrici occupying the gall bladder?—Consideration of these, and of the circumstances necessary to ascertain, or at least render probable, the existence of one or other of them.—Strictures on the propriety of denominating species of the complaint, from causes which often cannot be ascertained during life.

685. Other remote causes sometimes adduced, but less evident in their operation, and more difficultly explained; *e. gr.* Spasm of the ducts,—passions of the mind,—as anger,—fear,—grief,—terror,—surprize, &c.—injuries done to the brain;—suppression of menstrual, or hæmorrhoidal discharge;—drying up of habitual ulcers;—metastasis of eruptions:—the bites of poisonous animals?

686. Observations on the secretory and excretory function of the Liver—on the leading and characteristic symptoms of the disease,—and on the circumstances in

which the several remote causes (684-5) concur in producing.

687. **THE PROXIMATE CAUSE**, viz. a considerable or total obstruction to the passage of the Bile into the Duodenum, and a consequent absorption or regurgitation of it, into the circulating mass.

688. Examination of the cases and dissections adduced to support the opinion—that jaundice may occur without any obstruction to the free exit of the Bile;—and solution of the difficulty upon principles consistent with each other, and illustrative of a comprehensive theory respecting the nature of the Hepatic Function, and its influence in various forms of disease.

689. Appearances on dissection; and inquiry into the change alledged to take place in the colour of objects.

690. **THE PROGNOSIS** must be formed upon a consideration of the age, constitution, and previous health of the patient,—the degree and continuance of the disease,—the cause giving rise to it,—the effects it has produced,—and its being simple, or complicated with other disorders. — *Favourable circumstances*; — youth and previous general health,—appetite and strength little impaired,—absence of fever,—and of pain on pressure. — *Unfavourable circumstances*; — advanced life,—cachectic or scrophulous constitution,—pain and tenderness of the hepatic region,—symptomatic pyrexia,—hydropic tendency,—hæmorrhage, or ecchymoses.

691. **TREATMENT**. As the cure essentially consists in removing the obstruction to the free egress of the Bile from the Liver, the treatment will vary according to the nature of the cause giving rise to that (684-5):—the chief indications then will be——.

686. In the Case related by Mr Libbey in which the
vena Portæ did not go to the liver, the Bile was found
much thinner than usual and it was unfit for per-
forming its natural functions.

688. There may be Cases that have occurred but Dr
B. has never found it so.

689. One of the most common appearances is a thick-
ening of the Duct from a biliary calculus, Dr B. has known
calculi nearly an inch in diameter passed, sometimes
however there has been no obstruction or has any calcu-
lus been discovered to have been passed, the Bile in such
cases being viscidified, a Case was depicted by Mr Libbey
from the Phila in this state was found reaching only
half way down the common duct. Frequently we find the
Duct enlarged as to pass on the Duct and prevent any
thing passing.

690. If we find the general Health continue good, and he
has not been subject to any previous Disease, altho it
may continue a considerable time yet it may eventually
prove well.

11. I have said the ... the most ... with
... disease ... with
... symptoms, but ... it occurs in a young
... Habit ... be access-
... from the ... but ...
... also give ...
... given -

12. ... remove the ...
... it will be proper to exhibit ...

13. Purgatives. The combination of Aloes with certain
... alkalies, viz. Aloes alkaline, or cold Infus.
... Aloes ...
... Aloes ...
... 12 hours and give ...
... laxative. Bitters ...
... Aloes

14. When the Complaint has run its course
... will be found very an ...
... it is frequently attended with Haemorrhage
... from some part, and the blood will be
... impoverished, therefore it will be
... necessary to support the Patient by easily
... food as in this Complaint.
... will be useful as the ...
... the ...
... reactions in the ...
Eggs are a very useful part of it, but they
should be taken raw.

A. To lessen inflammatory action if present:—by Bloodletting, general and topical;—blisters;—tepid bath;—Antimonials, &c.

B. To alleviate pain, and to relax spasmodic constriction:—by Opiates—alone, or combined with Calomel and Antimonials, &c.—Electricity? *Warm Bath.*

C. To evacuate inspissated bile, mucus, or biliary concretions, blocking up the ducts:—by Emetics,—Cathartics;—kinds of these most proper.

D. To remove scirrhus or other affections of the Liver itself, or of contiguous parts:—by Mercury,—Cicuta, &c.

E. To supply the want of bile in the alimentary canal,—and to assist in carrying off that which floats in the circulating mass:—by Bitters;—Antacids;—laxatives:—Diuretics and Diaphoretics.

Lastly, F. To support the strength, until the obstruction be removed:—by Food easy of digestion, and suited to the general circumstances of the patient's constitution, and natural cravings.

692. Observations on the nature, formation, and variety of biliary concretions, or Gall Stones, illustrated by specimens, &c.;—and on the remedies that have been proposed for dissolving them while lodged in the gall-bladder,—or ducts.—Remarks on certain articles recommended as possessing specific powers in the cure of Jaundice, viz. raw eggs;—combination of Æther and Oil of turpentine;—Ext. Taraxaci;—Dec. Gram. Canini;—Alkalies, supercarbonated and caustic.—Native vegetable acids, Nitric Acid, &c. &c.

vide Saunders Treatise.

OF DIABETES.

693. SYN.—*Dipsacus*;—*Hydrops ad matulam*;—*Polyuria*;—*Chyluria*;—*Cachexia urinaria*? Origin and meaning of these terms respectively.

694. CHARACTER. Urine either having a saccharine quality,—being inordinate in quantity,—or both;—accompanied with dry or parched skin,—unusual craving for food and drink,—wasting of the flesh and strength,—and hectic pyrexia.

695. Detail of symptoms which generally attend the rise and progress of the disorder,—and the considerable variations which occur in individual cases.—Division of the complaint into two *species*, or rather, perhaps, into two distinct *forms*, viz. the *D. insipidus*, and *D. mellitus*,—with their characteristic marks,—the train of symptoms by which they are respectively accompanied,—their comparative frequency,—and the difference in their result.—Names designative of each proposed,—*Polyuria debilitans*,—and *Melituria tabifica*.

696. Chronological sketch of the disease, as noticed by different authors,—with an account of the principal theories offered by eminent physicians respecting its particular nature and seat, viz. by Aretæus,—Dr. Mead,—Dr. Home,—Dr. Cullen,—Dr. Dobson,—Dr. Darwin,—Dr. Rutherford,—Dr. Rollo,—Dr. Lubbock,—Dr. Watt.—Examination of these seriatim; and reasons for concluding, that the *two forms* (696) of the disease, respectively depend upon morbid states of different organs or functions.—Account of the appearances after death;—and application of them to illustrate and confirm this conclusion.—Strictures on the nosological

94
of the Tongue clamminess of the Mouth & of
an intense degree of thirst. Pers. from 80 to 1200. 30-
695 The clamminess of the Mouth so much that the
Tongue sticks to the roof of the Mouth. The Thirst so
intense that the Patient drinks several quarts
a day. The Emaciation equal to what you find
in Dropsy. The Urine often exceeding the quantity
of fluid taken in the Day, 30 to 40 not moderate
often double or triple this quantity. The Urine is
ammoniacal, viscid. Itching & Discharge from
Inflamm. of the Preput. Penis. The disease of Scars
entirely leaves the Patient with these symptoms
increase, swelling of the lower extremities, St. tic
low cough & difficulty of breathing & other symptoms
of the Chest. The Patient becomes Catarrhal, under
which he dies. The Disease often becomes some-
times a cessation for several months. common to
both sexes but more frequent in Men, but this
most probably owing to the delicacy of females concu-
piscence

In the most common form, Punctatus the urine is
of a pale straw colour with a peculiar smell, dis-
tinguishing from that of common Urine. It is of a sweet
vine taste & if evaporated it appears of the colour
of French or Portugal wine and will ferment once pro-
posed to Air. The specific gravity of the Urine is lower
than water.

The Patient's breath smells as if he had been chewing
new made Hay and he has the same sweet taste in his
Mouth. The Belly in the beginning is torpid, ^{torpid} at the conclusion
however we more frequently have Diarrhoea. more urine is
passed at night than in the Day, and the gums are swollen
In the D. Neopidus a large quantity of Urine is passed
which is deficient in its proportion of urea & it is viscid,
there is slight pain amongst the loins & thirst.

696. It will be conceived to be owing to some fault in the Dige-
tion and assimilatory ~~organs~~ functions, which appears to be
the most satisfactory theory, as it accords with what we observe
in this disease.

The Kidneys have generally been found healthy, they only
suffer from Punctation. In Patients laboring under Puncti-
tus in 99 cases in 100 an Abscess will be found in the lungs
and they go off with Lobar Pneumonia Fever.



place assigned to Diabetes by Sauvages, and by Dr. Cullen.

697. PREDISPOSING CAUSE. Uncertainty respecting the precise nature of that state of the system which gives a tendency to the *Melituria tabifica* ; but probability of its being often original and constitutional,—and therefore occasionally hereditary:—several striking instances of this related.

698. EXCITING CAUSES. Various and opposite ones mentioned by authors,—agreeing only in the circumstance of their ultimately weakening the tone and vigour either of the System at Large, or of particular organs, in persons already disposed to the disease,—*e. gr.* preceding complaints of the febrile kind, especially Intermitting Fevers ;—the excessive use of cold watery fluids—or of articles acting particularly upon the renal secretion ;—falls, blows, strains, or other injuries inflicted on the loins, and thereby affecting the kidneys ;—torpid, or obstructed and sluggish state of the Liver ;—&c.

699. PROXIMATE CAUSE—in *Polyuria debilitans* a state of the Uropoeietic vessels seemingly analagous to that of the exhalents in dropsy, (595) ;—in *Melituria tabifica* a perverted condition of the Digestive or Assimilatory functions, whereby the food is converted into blood of a loose texture, and of a quality neither fitted for the due nourishment and support of the body, nor for supplying the principles necessary to give the usual character and properties to the several secreted and excreted fluids.

700. DIAGNOSIS. This easy between Diabetes and any other disorder ; and only necessary between the two forms of itself (695) :—marks denoting these respectively.

701. PROGNOSIS.—To be drawn from the form of the disease,—its duration,—and consequences,—together with a consideration of the remedies already employed, and the effects they have had :—but, generally speaking, rather favourable in *Polyuria debilitans*,—and the contrary in *Melituria tabifica*.—Account of the unexpected, speedy, and fatal way in which the disease has occasionally been observed to terminate, with the appearances on dissection.

702. THE TREATMENT. — Necessarily different, accordingly as the disease consists merely in *augmented quantity*, or in *altered quality* of the Urine ;—or if these are combined, to the proportion of the one to the other. —The chief indications then, will be—

A. To increase or restore the perspiratory function, and thereby lessen the unusual determination to the kidneys ;—by Diaphoretics—the tepid bath ;—friction with oil ;—exercise ;—warm clothing ;—change of climate, &c.—

B. To correct the peculiar morbid state of the Chyllopoeietic or Sanguific functions, which occasions the saccharine quality of the Urine ;—by removing such obviously diseased action as may be detected in any of the organs concerned in this process, whether the Kidneys,—Stomach,—Liver,—Lungs, &c.—

C. To lessen or prevent the formation of saccharine matter, by abridging the use of Vegetables, or confining the patient almost entirely to Animal diet,—aided by medicines which seem the most remote from any thing like a vegetable acescent or saccharine quality,—*e. gr.* Sulphur,—Sulphuret of Potass,—Sulphurated Ammonia, &c.

D. To produce a sudden and general change of action

701 From what Dr. I have seen in their, that the
Progress in most cases must be considerable
unless it be in the early stage of the Disease.

702. It consists in an increased quantity of urine, the
Remedies applicable to Dropsy whether, Dropsy, but in the
worst form, Melleus, we are much concerned with any me-
dicine which will have a decided good effect, but attention
should be paid to the digestive organs.

ii The best Diaphoretic is the Pulv. Stomac. c. but
according to Dr. & experience to the effect is only
temporary.

The Antimonial Diaph. or Di. by the warm Baths.
Dr. Rush says the Patient should be kept in the Anti-
phlogistic regimen. Ipecac has been given to act
as an emetic & afterwards they give Ipecac, and it is
not surprising how much the water has been diminished
in quantity by this means.

6 The Patient should avoid eating sweet vegetables, as
the carrot, parsnip & Turnip, & the preference should
be given to greens, that the animal food may be
more readily digested it should be kept supple
best to make it tender, therefore the Carrots & Beans
are more proper; but in the latter stage of the
Disease we must be more cautious in limiting
the animal food from the great tendency to
indigestion in which the Patient labours at that
time requiring exceeding for a Glass of Beer
or the same view Medicines have been given
as the Sphatized Anarsonia.

Q. Some authors recommend Dr. B's powder to relieve the pain, in the lochia but never knew it cure the Complaint.

Dr. Hall strongly recommends bleeding largely & the Antiphlogistic plan. I tried it and the Patient appeared to derive benefit from it, but he relapsed and ultimately died from a Conical Canker in his lungs.

In the case of a Gentleman it was recommended to take ʒij of Symplicium with a Diet of Rhenish in warm soup. Since that Dr B has ordered the same remedy which he has found extremely useful also regulating the Diet and keeping up the force of the Stomach. Symplicium does not appear to begin alone

90 B. When it is connected with Dyspepsia, we generally find that the Urine is not increased in its specific gravity, and this will be a distinguishing mark.

in the Sanguiferous System, by reducing the *quantity of blood* to a due balance with the *power of the vessels*, —by Venesection, repeated from time to time, according to the degree of effect observed to result from it.

E. To assist in restoring the body at large to its pristine vigour, — by various tonic remedies, as Cinchona, — Sulphuric Acid, — Bitters, — Chalybeates, — Cold bath, — &c.

703. Remarks on particular remedies recommended in Diabetes, with testimonies for and against them; — the principles on which their utility may be explained, and the *forms* (695) of the disease to which they would appear especially adapted; — Alum in various forms, — Catechu, — Uva Ursi; — Rhubarb; — Tinct. Cantharidis; — Blisters, and other stimulant applications to the loins; — tight belt; — issues and setons; — Aqua Calcis; — Sulphur, and its combination with alkalies: — Acidum Citricum Sodæ Muriate; — &c. &c.

URINARY CONCRETIONS.

704. SYN. *Lithiasis*, Vogel and Macbride. — *Calculus urinarius* Auctorum: — *Anglicè Gravel* and *Stone*.

705. Difficulty of giving any short and precise character to this disease, from the difference in Situation, Structure, and Sympathy, of the organs affected; — from the variety, both in number and degree, of the Symptoms; — from many which are thought characteristic, being found to arise from other causes; — and from Calculi being discovered after death, in the kidneys and bladder of persons who had never made any particular complaint indicative of their presence.

706. Usual symptoms of Calculus, or of the *lithopoeietic process* in the *Kidney*; — Pain in the region of

the kidney, increased on motion;—sometimes violent pain referred to the Stomach, accompanied with nausea and vomiting;—at others, dull pain stretching along the Ureter, with numbness of the thigh, and retraction or pain of the testicle on that side:—Urine variable, sometimes pale and copious,—oftener high coloured and scanty, and depositing a lateritious sediment,—minute red crystals,—pus,—or blood:—occasionally attended by pyrexia.

707. **CYSTIC CALCULUS** commonly marked by frequent, difficult, and painful discharge, sometimes with sudden suppression, and sometimes with constant stillicidium, of urine:—dull pain and sense of weight affecting the perinæum, urethra, and rectum;—itching or dull pain of the glans penis:—Urine as in par. 706, or loaded with mucus.

708. **DIAGNOSIS.** Circumstances serving to distinguish Lithiasis from the symptoms occasioned by Lum-bago,—stricture of the Urethra,—enlarged Prostate,—thickened bladder, &c.

709. **CAUSES:**—*Predisposing*,—a constitutional disposition strikingly prevalent in individuals,—often obviously hereditary,—very frequently connected with Gout, and commonly with Indigestion:—*Exciting*;—whatever tends either directly or indirectly to weaken the tone of the urinary organs, *ex. gr.* inflammatory irritation, whether arising spontaneously under general fever,—from cold applied to the loins and pelvis,—from gouty or rheumatic metastasis,—from mechanical injury, as blows, falls, strains, hard riding, &c.—or from articles specifically affecting the urinary passages, as Cantharides, Turpentine, &c.—the excessive use of neutral saline diuretics;—the use of hard water.—Long confinement to a recumbent posture;—too long retention of urine;—Sedentary inactive life;—Indigestion;—Foreign bodies

768. In leucorrhoea the Patient is unable to alter his position without pain in the loins. An enlarged Prostate may be ascertained by examination per ano, it will also be known by the difficulty it causes in passing the catheter and at the age at which it occurs. A thickening of the Bladder will be known by an enlargement, the pain is most acute when the Bladder is half empty. The cyst occurs in the loins, & there being no pain at the end of the Penis.

It is often confounded in the Female with Schismus Uteri this will be known by the age at which it occurs, pain down the back similar to labour pains and by the enlargement of the Uterus.

Q. After Bloodletting we may give a full dose of Opium
either by the Mouth, or in the form of Glyster - viz.
It is a question how far we may venture on Antimony
as it is accompanied with continued sickness.

introduced into the bladder.—Why Women less subject to urinary calculi, especially of the bladder, than Men.

710. Account of the prodigious size, or great number of stones recorded;—the singular articles occasionally forming their nucleus;—the difference in their shape, colour, texture, &c.—and the variation observable in the same calculus during its increase;—illustrated by specimens.

711. Chemical examination of Urinary Concretions;—the variety in the kind, and proportion, of their component parts, connected with their external character, the symptoms they excite, and the state of the Urine;—explaining the efficacy of opposite anti-lithic remedies; and affording ground for their employment *a priori*.

712. Inquiry into the nature of the morbid state productive of Urinary Calculus;—its analogy to, and its frequent connection and alternation with Gout shewn; and reasons for believing, that they are only modifications of the same disease, as affecting organs differing in structure, functions, &c.

713. PROGNOSIS.—To be drawn from the age and constitution of the patient;—the duration,—degree,—and form of the disease;—its effects upon the general system, or the particular parts;—the kind of remedies already employed, and their result.

714. TREATMENT. The plan will be either *cure*-*tive*, or *merely palliative*, according to circumstances. The general indications are,—

A. To mitigate urgent symptoms, as inflammation, —pain,—spasm, &c.—by Bloodletting general or topical;—warm bath;—fomentations;—laxatives;—*Digitalis*?—Opiates, alone or with Antimonials,—in glyster, &c.

B. To expel, dissolve, or otherwise remove Concre-

tions already formed ;—by mild diuretics,—mucilaginous diluents ;—articles possessing a chemically solvent power on calculi *out* of the body, and concluded to exert a lithontriptic one *within* it, *e. gr.* caustic and mild alkalies, in different forms ;—Lime Water ;—Soap ;—Acids, particularly the Carbonic and Muriatic ;—Phosphoric Acid ?—Proposal of injecting insolvents into the bladder,—and of performing Nephrotomy,—considered. Account of modes proposed to remove Calculi lodged in the Urethra, without cutting.

C. To correct that state of the System, or of the Urinary Organs, upon which the *formation* of Calculi depends (712),—by regulation of Diet and Regimen, adapted to the case ;—correcting morbid state of Digestion (See DYSPEPSIA) :—Uva Ursi, and other Astringents :—Turpentine and Balsams.

715. Remarks on particular remedies ;—Greenfield's combination of Cantharides in substance, and Camphor ;—Mrs. Stephens's solvent.—Chittick's nostrum, &c.

OF ASTHMA.

716. Derivation and meaning of the name.

717. GENERAL CHARACTER : difficulty of breathing recurring at intervals, accompanied with sense of straitness and oppression in the chest, and sonorous respiration ; generally also with cough, at first short and difficult, but towards the end of the paroxysm more free, and often with copious expectoration of mucus.

718. Distinction between Dyspnœa, Orthopnœa, and Asthma ; and the appropriate application of these terms to different states and forms of difficult breathing pointed out.

3. It is doubtful whether the Uriniferous is ever carried
to the Kidney, Dr. Ballou thinks that Urine. &c. are only use-
ful from the quantity of water that they contain.

When the Calculus consists of Urine Acid the caustic and
its Alkalies will be proper, or Soap and Rhubarb may
be substituted as the latter will keep the bowels open.

When the Urine deposits a white sediment, I think of Phos-
phoric Mineral. Acid will cause it to be suspended and carried
off, but the Sulphuric Water will be preferable.

After giving the Alkalies in the former case for some time
it will find the Urine exhibiting the opposite properties and
depositing the Phosphoric Salt, here then you should give Acids
and by these means you will considerably lessen the disposi-
tion to form these concretions.

Dr. L. knows of one Case where Calculi were injected into the
Bladder, but without any success as the Patient eventually died.

With this view a Jaeger has been sent on the River to collect
Urine to collect in the Bladder, when there was sufficient
was taken off the water allowed to escape.

Mr. Cooper has also introduced a pair of Forceps into the Bladder
in the shape of a sound and thus removed a number of
small Calculi.

(And see Brand's Lect. in the 12th V. of Journal of Art & Science.)
The same use with the Vegetable Series may be given to all
Suitability of the Bladder.

715. Cauphon has been given with Cantharides with the
view of lessening its irritating effects, but I doubt whether
it has this power.
It is chief ingredient in Quack's Symplics & Colocynthis (see
Oyster shells.)

722 Then authors who have supposed Asthma to be
produced by an Effusion of Serum into the Bronchial
Cells, appear to have mistaken an Effect for a Cause
of the Disease, among whom is Dr. Boerhaave - Of course
his Works are worthy of perusal.
It seems that it is owing to one original Structure in
the Air Cells.

720. If the Patient is subject to the Complaint he is taken in the Night, about one or two o'clock the attack comes on he is obliged to sit up, the bed clothes must be thrown off. The curtains & even the window opened to receive the fresh air. He appears as if he had a ligature tied round the chest, & his distress is to the extreme, he must remain in this state for two or three or much longer. The external face are cold, in the face he is in such a state of desperation as to fly of bed and run to the window, when the symptoms begin to subside the secretions return if he has a cough during the paroxysm it is dry but now it is attended with a profuse secretion, when the symptoms go off he goes to bed appears comfortable & soon looks extremely pale & then falls to sleep; the next night he may have another attack, then the Disease wears out, and he has no return until he is again exposed to any exciting Cause.

722 The principal seat of this Disease is in the Membrane lining the Trachea. Bronchi and its ramifications.

723 Genuine Asthma comes on in the Night & is unattended with secretion in the earlier part not so with Catarrh. Cough is a Complaint of the earlier part of life while Asthma occurs in the latter stages, Asthma never in the first case not so in the latter. The sound of the respiration also is different. In Hydrothorax the Patient seldom has a Cough, if he has it does not come on in the forenoon Angina Pectoris always come on while in his exertions, the Patient complains of severe pain X

719. Division of Asthma into *idiopathic*,—and *symptomatic* (*A. hystericum*,—*hypochondriacum*,—*arthriticum*,—*exanthematicum*); and importance of this in a curative view.

720. Detail of symptoms which generally precede, accompany, and follow the paroxysm; and occasional variation of these, explaining the different forms it assumes, and accounting for the terms of *continued* and *periodic*,—*humid* and *dry*,—*catarrhal* and *spasmodic* asthma, given to it by authors.

721. CAUSES: — *Predisposing*—a peculiarity of constitution, especially with respect to the Lungs, and this often hereditary:—*Exciting*,—irritation from various organic diseases of the lungs, heart, diaphragm, &c.;—plethora;—distension of stomach?—sudden refrigeration, especially from cold air when the body is overheated:—breathing very hot, or otherwise rarified air;—inhaling various kinds of dust,—smoke, or acrid vapours;—mephitic gases;—metallic fumes;—certain conditions of the air, independent of temperature or moisture, and operating differently upon different patients; exanthematic metastasis, or suppression of customary discharges;—passions of the mind;—particular odours, &c.

722. Examination of the proximate cause of the Asthmatic paroxysm, as alledged by different writers; and investigation of its probable nature and seat, founded on a consideration of the symptoms, exciting causes, &c. and leading to a consistent plan of treatment.

723. DIAGNOSIS. Circumstances distinguishing Asthma from Catarrh, Croup, Hydrothorax, and Angina Pectoris;—and from the difficulty of breathing which sometimes attends Hysteria, Hypochondriasis, Intermit-

ting Fevers, &c. or is owing to foreign bodies accidentally getting into the trachea.

724. PROGNOSIS;—except where the constitution is unimpaired,—the disease recent,—not hereditary,—and arising from some metastasis,—generally unfavourable:—but often recurs with severity for many years, and seldomer proves fatal from the violence of the paroxysm, than from inducing hydrothorax, &c.

725. THE TREATMENT varies considerably accordingly as the disease occurs in a plethoric or exsanguious habit,—as it is idiopathic or symptomatic (719),—carrhal, or purely spasmodic (720). The general indications, however, are—

A. To remove such of the exciting causes as may still continue to act:—

B. To relieve urgent symptoms arising from *vascular repletion*,—by general or topical bloodletting;—cautions respecting the former;—and doubts as to the utility of the latter:—*from Spasm*,—by Opium,—Æther,—Ammonia,—Musk,—Camphor,—Cajeput Oil,—strong Coffee,—Cold Air and Drink,—Pediluvium,—Asafoetida, &c. —*from viscid phlegm*,—by nauseating Emetics, Ipecacuanha, Squills, Tobacco, Mustard;—Cathartics;—these either alone, or combined with Opiates, and sometimes given in clyster.

C. To recal to its original and proper seat and form, any other disease, upon the disappearance or metastasis of which the Asthmatic complaint had supervened;—or to compensate for it, by exciting some analogous action or discharge,—by Sinapisms,—blisters,—hot bath,—Emmenagogues,—Diaphoretics,—Sulphur;—Issues,—Setons.

24. I fear what I have seen we must be induced to give an unfavorable prognosis, not that the Patient is to die immediately, but in the greater number of cases they eventually sink under the Complaint.

A. Advantage will be derived from a more regular mode of living, avoiding any particular article of food which might have brought it on. Patients care not to expose the body to cold air, or a draft when overheated by exercise or changing the dress. Also paying attention to the situation in which the Patient lives.

B. If the Patient is Plethoric, to relieve the congestion in the Chest by taking away blood, but not so much as in Inflamⁿ. If he is capable of swallowing decamp the Spasms give Spt Ether Sulphur with a few drops of Spt Oiliv. or any other Astringent for medicine. Smoothing the root of the Trachea with other remedies the Spasms. The best is brought from the East.

6. Galvanism has been recommended by Dr Wilson Phillips.
He thinks that it is only applicable to the Spasmodic form and in
an ~~exaggerated~~ ^{exaggerated} Habits - Several authors mention the
effects of breathing oxygen gas, but I do not think it
very advantageous as Dr Berdoon states it to be - As to the
Ironic Acid Gas, we rather find that Patients are drawn to
breathing a pure atmosphere, and it appears that Carb. A Gas
is sometimes an exciting cause. Dr thinks that the only
remedy would be to change the climate for a few years.

727. In the much sympathizing over the anary
with the chest, the Patient will receive ad-
vantage from Alkalies & Bitters.

When the Disease becomes chronic, Anarsonia,
Myrrh, Colchicum & Squills will be found useful
Remedies. of Hyacin. p. 1-15. Pil. Sili. 6. gr. viii. Pil.
of 4. or 6. grains. recommended. Dr B

Digitalis & Auricula are adapted to Plethoric Habit; and
more than Labour under the Plethoric form of Asthma.
The Mineral acids are applicable ^{to the} who have suffered from
Reticularia, and when there is a Stomachic Affection.
Rheumatic Patients should only eat a moderate quantity at a
time and not fast long, fermented liquors are always inju-
rious, the Diet should be regulated according to the Habit of Body
of the Patient.

728 The Case of a child lady mentioned above it occurred
a second time.

729 In the same form during the long season of
the 2. winter takes place from different part. how, by the

730 The Seat of this Disease is the Trachea, and in one
case which Mr Cooper examined he found only 1/2 of the
of the trachea. It is not contagious after three weeks
continuance.

D. To correct such cognizable morbid state of the system at large, or of any individual function, as appears to be connected with, and to aggravate, the asthmatic tendency;—by Cinchona,—preparations of Zinc, Copper, &c. cold bathing,—Cicuta,—Digitalis,—Diuretics,—Acids;—suitable diet and regimen.

726. Remarks upon particular remedies occasionally recommended;—Oxygen gas;—Arsenic;—metallic Quicksilver;—re-inoculation of the itch;—breathing Carbonic-Acid Gas, &c. &c.

OF WHOOPING COUGH.

727. SYN. *Tussis convulsiva* of most authors;—*Pertussis*, Cull.—Anglice, *Kink* or *Whooping Cough*; improperly *Chincough*.

728. CHARACTER. Frequent and violent fits of coughing, consisting of many successive short expirations, followed by one deep and loud inspiration, and these quickly alternating for several times,—generally ending with the expectoration of very tough phlegm, often with sneezing, and frequently with vomiting:—Evidently contagious;—usually epidemic;—affecting children more especially;—and occurring but once during life.

729. Mode in which the disease commences and proceeds; and variation of symptoms depending on constitution,—habit of body,—and preceding or casually accompanying complaints. — Division into the *Catarrhal*, and *simply Spasmodic* forms.

730. Inquiry into the nature and chief seat of the disease;—and arguments, both from analogy and facts, tending to shew,—that it has a definite period of duration in its *acute* and *contagious* state.—Division of it

into *two stages*, viz. the *Specific*, and *Habitual*; and the relative continuance of these;—explaining apparent difficulties, and directing to a consistent and successful plan of treatment.

731. CAUSES :—*Predisposing*—A constitutional susceptibility common to children, differing greatly in individuals, and rapidly diminishing by age :—*Exciting*—(A.) *of the disease*—the specific Contagion, probably exhaled and inhaled with the breath ;—(B.) *of the paroxysms*,—bodily exertion, as running, &c. distension of stomach,—indigestible food,—irritation of the lungs from smoke, &c.—passion of anger, crying.

732. DIAGNOSIS. — Difficulty of distinguishing Whooping Cough from Catarrh in the beginning : marks assisting to do this, where they are not combined.

733. PROGNOSIS. The disease especially fatal to infants,—to children born of phthisical or asthmatic parents,—and to those possessing general delicacy of frame, or reduced by preceding illness.—Unfortunate combination with Measles or Catarrh.—Epistaxis sometimes relieves ; but is often a mark of severe disease, and when copious or frequent proves hurtful.—Sometimes terminates suddenly in convulsions and death ; but the fatal event generally preceded by constant dyspnœa, livid colour of the face, extremities, &c.—Often brings on Phthisis, and mesenteric obstruction ; occasionally Jaundice :—common mode in which it probably acts.

734. Explanation of certain symptoms ;—and appearance of the lungs in fatal cases.

735. TREATMENT. When symptoms mild, little interference necessary,—there being no Antidote to the Specific Exciting Cause. The general indications are,—throughout the complaint, but especially—

732 But by assuming accurately we shall find that the
lough comes in the Paroxysms and is followed by vomiting.

733. But if the Paroxysms are severe, returning frequently
it occurs in a delicate C. P. attended with considerable
degrees of fever &c. then we may expect it will be seen
not unfavourably.



735 In the early part of the disease taking care
that the Child be not exposed to cold air, & pay
attention to the Diet & Bowels. When the Chest is
overloaded give Emetics as, equal parts of Acet.
Sulphur & Vin Theriac in small quantities until
it produces vomiting, Advantage will be derived
from repeating this once in 24 hours. *SB.*
If the Habit be followed by Contin. Drafts, when there is
much Mucus secreted in Intest. should be given and this
before the Purgative evacuation. When these Habits are much
prevalently on the Intest. joined with Drafts, and Rub
foment to the Chest.

In the second stage Dr. B. knows of no remedy as
useful as Cornicin, you may begin with Fevers.
Give it a Dose of 3 grains, gradually increasing to 20.
at the same time watching its effects.

The Temperature of the Air shd. be regulated *SB.*

Sig. Bala joined with Squills is a useful remedy.

Quich is the most powerful antispasmodic we can give
and is applicable to Cases depending on Irritability.

There is a Gripe which does not heat and is act. as an
antispasmodic.

736 When the violence of the Disease is gone off the Child
will reap advantage from being taken into the
open air. If there is much debility the Bark
may be given either Acidulated or not.

IN THE FIRST STAGE (730) to mitigate urgent symptoms, whether (a) of the *Catarrhal*,—or (b.) of the *Spasmodic* kind (729);—(a.) by bloodletting, general or local, according to the degree of plethora, or of febrile irritation and dyspnoea present;—by Laxatives;—occasional nauseating Emetics, and Expectorants;—by Blisters;—mild Diaphoretics, &c. —Choice and management of these respectively.

IN THE SECOND STAGE,—to break the habit of recurrence, by lessening general or local irritability, and giving tone to the system at large:—by Opiates,—*Digitalis*,—*Cicuta*, — *Hyoscyamus*?—*Castor*;—*Musk*, &c. — *Cinchona*; — preparations of *Zinc*;—*Myrrh*;—*Chalybeates*, &c. — stimulant and opiate frictions, &c. to the stomach and spine;—change of air.—Cold bath.

736. Remarks on certain remedies occasionally employed, and on their *modus operandi* when beneficial:—Dr. Burton's combination of *Cinchona*, *Cantharides*, and *Camphor*; and improvement on his *formula*.—*Musculus pixidatus*.—Roach's embrocation.—Moderate impression of fear.

OF COLIC.

737. SYN. *Enterodynia*?—Derivation of the term Colic: includes a number of painful abdominal affections, differing widely in their particular seat and causes, and agreeing only in their

738. GENERAL CHARACTER of—deep-seated pain, occupying especially the epigastric and umbilical regions, —generally attended with costiveness, and sometimes with vomiting.

739. Division into species, according to its nature, or to its real or alledged

740. EXCITING CAUSES;—*e. gr.* flatus (*C. flatulenta—hysterica?*);—accumulated fœces (*C. stercorea, —gravidarum*);—articles swallowed, and irritating the intestines from their indigestible nature, or their mechanical, chemical, or specific quality (*C. accidentalis*);—worms (*C. verminosa*) calculous or other concretions lodged in the colon (*C. calculosa*) or in the kidney (*C. nephritica*);—copious excretion of acrid bile (*C. bilosa*) gall-stones (*C. cholethica*; See JAUNDICE);—retention of the meconium (*C. meconialis*);—acidity of the primæ viæ (*C. infantum, —dyspepticorum*);—metastasis of gout, rheumatism, &c. (*C. arthritica, &c.*)—dentition;—cold applied, especially to the feet (*C. phlogistica*)—scirrhus or other coarctation of the intestinal tube (*scirrhus rectum, &c.*);—application of lead in various modes (*C. Pictonum*; Devonshire Colic;—*Dry Belly-ache* of the West Indies? &c.)—Periodical or Intermittent Colic.

741. Symptoms, &c. respectively denoting these several species.

742. PREDISPOSING CAUSE.—Constitutional or acquired irritability of the muscular fibres of the intestines.

743. PROXIMATE CAUSE.—Violent spasm affecting a portion of the intestinal canal, and preventing the ready descent of the fœculent or other contents.

744. THE PROGNOSIS must be drawn from—the age, constitution, and previous health of the patient,—the continuance, repetition, and degree of the disease,—and the known or probable causes giving rise to it;—but above all, from the absence or presence of inflammation

40. Stated: if from this give Carnatives, as the
Dr. Joseph. C. either alone or with Opium and Ether, or
Z. Senna, & Rhubarb. You may have the enlargement
of the Abdomen so to that extent from accumulated
Food as to be mistaken for Pregnancy or an enlarged
Liver. ^{benign} ~~benign~~ The Tumor is most likely to be
attended with Colic. If there be ascites the In-
flation is in the lower part of the Tumor, causing
itching of the Anus. If lumbrici, pain in the Sto-
mach, sometimes producing vomiting.

In Tumor Dr. P. recommends the Use of Turpentine
but the Dose ought not to go beyond \frac{ss} Zips.

The effects of taking any preparation of Lead are
violent spasms of the Abdominal Muscles, extreme
pain in the Bowels, and obstinate Costiveness.

To give relief to the pain & costiveness, a warm
Bath give Diluent Injections also Opium united
with the necessary quantity of Cathartic and pay
attention to the Patient's Diet.

215 In the treatment of cases of this kind if you begin with Purgatives, you will not be able to relieve the Patient. The first object therefore is to relieve the Spasm, to do which you should administer the necessary quantity of Opium and with it either Lt. Colic. Sulph. - Aloes &c. perhaps the best is. Calomel. & Lt. Colic. & Opium, but the proportion of the latter must be great, from gr. i to iv every 2 or 3 hours; After it has relieved the Spasm an ordinary quantity of any Cathartic will produce the necessary effect on the Bowels. Dr B. recommends the Pulv. Theriac. & as a good form of Opium. If the Patient has received Relief we have then to restore the energy of the Parts. Dr B. recommends the different Balsamic Preparations with Dr Sydenham the Balsam of Peru was a favourite form; but the Bals. of Canada or Cassia will be rubbed down more easily; if given in doses of \frac{ss} 2 or 3 times in 24 Hours it will operate on the Bowels 2 or 3 times, therefore more useful. In common with all other Balsamic Preparations they produce a peculiar Irritation on the Skin, the same is not so liable to be cured by Bals. Peru. This in some Cases is extending over the whole surface of the Skin, particularly the Face & Neck and proving very troublesome Itchings.

or fixed obstruction.—*Favourable Symptoms*;—intermission of pain or occasional change in its seat;—slow, or but little quickened pulse;—pressure being easily borne, or giving relief;—fœculent evacuations.—*Bad Signs*;—Frequent retching;—obstinate costiveness;—tension of the abdomen, and pain on pressure;—pulse very frequent, small and hard:—hot dry skin, or partial clammy sweats;—dry brown tongue;—hiccup;—delirium.—Colic from lead often ends in tedious paralysis of the extremities, especially of the wrists. (See PALSY.)

745. TREATMENT. Although as far as the disease is merely dependant on Spasm, the plan of cure is simple and generally successful; yet from the very different nature of the Exciting Causes (740), a minute investigation of the rise, progress, &c. of the attack, is of great utility in directing particular measures.—The chief indications are—1st. To prevent or remove inflammatory action;—2d. To relieve pain and spasm;—3d. To procure free and fœculent evacuations;—4th. To guard against a recurrence of the disease.

746. Means calculated to fulfil these several indications respectively adapted to the particular species (733), degree, or stage of the complaint,—considered *seriatim*, under the heads of,—1st. Bloodletting, general or topical;—warm bath,—fomentations;—blisters;—2d. Aromatics:—Opiates by the mouth or anus;—3d. Cathartics,—*e. gr.* Magnesia Vitriolata,—Ol. Ricini,—Calomel, or the milder mercurial preparations,—Extr. Colocynth: Comp. &c. Rules for the choice and management of these; and particularly with regard to the circumstances under which cathartics are proper, or even safe.

747. Remarks on particular remedies occasionally employed in Colic;—Affusion of cold water on the lower extremities;—Clyster of tobacco smoke, or infusion?—Turpentine clyster;—Alum;—Sulphas Cupri;—Petroleum, &c.

748. Means necessary to guard against future attacks, —Riding,—Sailing,—Friction,—Diet,—Regimen,—Clothing, &c.

OF TETANUS.

749. A general term, including *Trismus*, or Locked Jaw,—*Opisthotonos*,—*Emprosthotonos*,—and *Pleurosthotonos*: meaning of these respectively.

750. GENERAL CHARACTER. Spastic rigidity of the voluntary muscles, especially of the jaw, neck, and trunk of the body, accompanied with violent pain, and with occasional convulsive exacerbations :—without primary fever or affection of the sensorium.

751. Detail of symptoms marking the commencement and progress of the disease under the different forms enumerated above, (par. 749); and comparative frequency of these forms.

752. PREDISPOSING CAUSES.—Perhaps an original and constitutional tendency to cramp or spasm;—hot climate and season;—a somewhat peculiar, but yet unascertained, in the soil, air, &c. of certain countries;—and in a general way, whatever weakens the tone, and increases the mobility of the muscular system.

753. EXCITING CAUSES. Sudden refrigeration, especially when the body is overheated and perspiring. (*T. a frigore*)—Local irritation, from wounds, bruises,

740 In addition to the foregoing Remedies it will
be advisable to send the Patient to the Sea
for the advantage of the Sea Bathing, or even to
Baths.

750 Also ^{with} Difficulty of Breathing & Swallowing, great
Disturbance of the Pulse & Constipation of the Bowels.

751 Stiffness of the Jaws, contraction of the Muscles
about the Eyes, even now the Patient cannot depress the
Law to its proper extent, as the Disease increases the
Rigidity & Spasm of the Muscles becomes general, but parti-
cularly of the Diaphragm, then the expansion of the Pouches
and is well marked from the contraction of the Thoracic
Muscles. The Patient will be bent in that position, in which
the Muscles contract, at both before & behind, then he will
not quite upright if placed in a chair; But the Muscles
of Inspiration are more particularly affected, this causing
the great danger, also than of Expiration, Rabies begins
as the Disease advances there is a marked determination
to the Brain, the Patient becomes covered with a profuse pers-
piration; as to when the Disease shall terminate it is
quite uncertain.

tends to the Muscles of other parts, as the Neck, Bridge of

52. Humors & vitia certainly predisposes to the
complaint, the most common of which is observed in warm
climates, it occurs in the proportion of 20 to 1.
We should consider that a woman after laying in is more
exposed to this disease, also when the blood is weakened
by disease, often has it occurred that when an injured
part has been nearly ^{well} that it has come on.

53. The probability of its occurrence bears no proportion
to the degree of injury, as it may arise from a slight hurt
particularly of the lower extremities.

756 Under Convulsions the Patient is senseless, to be sure
as in Tetanus, at the end of the Complaint he may become
delirious, but not at all in the commencement. Epilepsy
is of long continuance and never proves fatal.

757 When the Disease occurs with us, the chances are
10 to 1 against the Patient, but not so in warm Climates.
For there it is just the reverse, for it is as unlikely there
for the Disease to be present to Bengal and Java to Mexico,
and it is in these places that it occurs spontaneously.

&c. (*T. traumaticus*.) Acid or other saburra in the primæ viæ of infants.—Retrocedent or repelled gout;—suppressed menses.—Preceding *Colica Pictonum*, or Dry Belly-Ache.

754. Occasionally takes place as a symptomatic affection in tropical fevers (*T. febricosus*);— is sometimes also an anomalous form of hysteria (*T. hystericus*); and an effect of certain narcotic poisons.

755. PROXIMATE CAUSE. — Investigation of the peculiar morbid state of the Nervous System productive of Tetanus,—from a consideration of the predisposing and exciting causes; and its not being peculiar to Man:—and inquiry how far it depends upon the Brain, or upon the Sentient Extremities of the Nerves; with deductions from thence as to the treatment, compared with the result of experience.—Strong analogy in certain respects, and difference in others, between Tetanus and Hydrophobia; with conclusions, as to the means to be employed in the latter.

756. DIAGNOSIS. Circumstances distinguishing incipient Tetanus from Rheumatic affection, — from Convulsion,—Catalepsy,—or anomalous symptomatic spasm.

757. PROGNOSIS,—to be drawn chiefly from the disease occurring in a warm climate, or in a temperate or cold one;—its arising from general causes, or from local injury;—the violence of the symptoms, and the length of time they have continued;—together with the means already employed, and their effects.

758. TREATMENT:—this still vague and dissimilar from the obscurity of the Proximate Cause, and from the undecided superiority of any individual plan.—The general indications, however, are—

A. To remove such local irritation as appeared to excite the disease, and may still continue to act.—By cutting off the communication between the local source of irritation and the brain—(*a.*) by dividing the connecting nerves;—(*b.*) by destroying the diseased extremities of the nerves, with caustics, &c.—(*c.*) Inducing a temporary paralysis of them by sedative applications,—as Opium,—Lead?—Belladonna? &c.—(*d.*) Altering the peculiar nature of the irritation, by exciting a higher degree, or another kind of action in the part,—by Ol. Terbinthinæ,—Ol. Succini,—Cantharides,—Ammonia,—Mercurial preparations,—&c.—Examples of success and of failure in the use of these respectively.

B. To lessen the general irritability, and tendency to involuntary muscular contraction.—By Venesection, to diminish general fulness and tension of the vascular system:—question how far it is either indicated or useful in those places where the disease is most common;—circumstances under which perhaps it may be had recourse to.—(*b.*) Opium internally;—instances of prodigious quantities taken without obvious benefit.—(*c.*) Warm bath;—contradictory evidence respecting it.—(*d.*) Cold bath;—strong testimonies in its favour,—instances of its proving suddenly fatal;—cautions which appear necessary in its use. Quick alternation of hot and cold bath.—(*e.*) Cinchona,—Wine, &c.—the prophylactic probably superior to the curative power of these.—Digitalis;—highly deserving attention, as well from its general sedative power, as from its good effect in other convulsive and spasmodic diseases.

C. To restore the tone of the Nervous and Muscular Systems, and thereby guard against a relapse,

2. When it is produced by a wound, it should be carefully examined & any of the various substances recommended to foment the part, can apply freely. As the nervous fluid is to the part have frequently been divided without the least advantage, it should be done early if at all.

Dr. B. has seen it carried to a large extent, given in Dozessix times as much as common, the Hot Bath used, & Mercury given very luxuriantly, without producing any effect on the Disease.

If the Patient be young and plump it will be advisable to lower the system somewhat.

Dr. B. thinks that Opium must be regarded as our principal remedy until something new be discovered. He has seen a great number of Cases recover, either by Opium, than any thing else. If you wish to apply it to any particular part, the best way will be to remove the Cuticle by a Blister then apply the Opium. Dr. B. prefers the Cold to the Hot Bath, more advantage will be derived if the Body be previously heated either by Vapor or the Hot Bath.

759 Dr. C. has seen one Case cured by Arsenic, it was given in Doses of 20 Drops of Fowler's Solution, after a few Doses it produced sickness. Dr. should be inclined to try it after Bleeding & Purging if necessary. when Tonics are indicated.

760. Some have supposed it to be connected with a peculiar state of the Atmosphere, viz, when there is a considerable degree of moisture, others with a disordered state of the Elementary Canal in consequence of the retention of the Meconium, others again have ascribed it to irritation of the Umbilical Cord. Dr. mentions a case which proved fatal where Opium, the warm Bath & other Antispasmodics were given, but attention was not sufficiently paid to the Bowels, he examined the Patient after death & was surprised to find so large a collection of feculent matter in the Bowels. This showing the necessity of purging in such cases. Dr. recommends when the Bowels are costive injecting a stimulant Purgative compound of Sweet. Coloc. the Salt & Oil.

762. Apoplexy & Paralysis are so nearly allied, that the one is generally the consequence of the other.

763. The attack is so sudden as to appear as if he had received a blow on the Head with a Hammer, sometimes he dies at once, at others he lugs & recovers & appears to know nothing, the Pulse will be full & quick, Inspiration short & noisy, countenance bloated, nausea, sometimes vomiting; urine & feces pass involuntarily; he may lay in this state for Days & Weeks if he is able to take nourishment he may recover. If he is to sink, there will be great defect of vital power, marked by smallness of the Pulse, cold, clammy & colligative sweats, with great depression of strength. Where there is scarcely any Hope. Sometimes the Humour is impaired ~~some~~ for a considerable time before the Attack comes on.

—This indication fulfilled in part by *d*, and *e*, (A. 758)
 —by change of climate, &c. friction,—exercise, &c.

759. Remarks on particular remedies occasionally recommended.—Electricity,—Galvanism;—friction with oil;—Tinct. Ferri Muriatis;—Arnica,—Camphor,—Petroleum,—Cicuta, &c.

760. Account of the *Trismus nascentium*, or Locked-Jaw affecting new-born infants;—the countries and circumstances in which it more especially occurs;—the points in which these agree;—the several causes alleged;—and the treatment found most effectual in preventing or curing it:—leading to the important conclusion—that in every form of Tetanic complaint, not only the alimentary canal, but certain organs *functionally* connected therewith, are a chief source either of primary or secondary irritation;—and explaining the superior utility of certain remedies, *e. gr.* Mercury,—Alcalies,—and Cathartics,—as acknowledged by writers of authority on the mere ground of experience.

OF APOPLEXY.

761. Derivation and meaning of the term.

762. CHARACTER. Sudden and considerable diminution of Sense and of Voluntary Motion, accompanied with Sopor resembling deep sleep,—often with slow stertorous breathing, and generally with Hemiplegia:—the motion of the heart and arteries continuing.

763. The attack usually preceded for some time by—occasional vertigo,—sense of fulness and pain in the head, noise in the ears,—stammering in speech,—numbness, involuntary agitation, and prickling sensation in the extremities, especially in one or other arm,

with redness, and swelling of the veins ;—flatulence and distension of the stomach and intestines ; — dyspnœa ;—great depression of spirits ;—drowsiness, especially after eating ; — disturbed sleep ;—night mare, and terrific dreams ;—flushing of the face and neck ;—throbbing of the heart and temporal arteries ;—temporary blindness, with appearance of sparks or flashes of light before the eyes.

764. PREDISPOSING CAUSES ;—a peculiarity of constitution, frequently hereditary, but oftener connected with dark eyes and hair, short neck, and corpulent habit, than with an opposite description of person.—Advanced age ;—sedentary life ;—full diet, and habitual though inconsiderable excess in the use of Wine and malt liquors ;—stoppage of customary discharges, as Epistaxis, Hæmorrhoidal or Menstrual flux, &c.

765. EXCITING CAUSES—whatever, under a state of predisposition (764), either—determines an unusual quantity of blood to the head,—prevents a free return of it from thence,—or directly impairs the energy of the Brain,—so as to produce—either Simple Congestion, or this followed by Serous Effusion, or by rupture of vessels, and Extravasation of Blood.—Existence of these separately and conjointly, shewn from dissections ;—with the symptoms respectively denoting the *probability* of their presence during life.

766. Individual Exciting Causes ;—and explanation of the modes in which they respectively act ;—Fits of Anger,—great heat,—Intoxication,—violent muscular efforts,—depending position of the head,—tight ligatures round the neck,—impeded respiration,—over-distension of stomach,—Tumours pressing on the superior Cava, or descending Aorta ;—Narcotic Poisons,—fumes of

766. We often find that Apoplexy is connected with a disor-
-dered state of the Cerebratory Canals, and after bleeding
by attending to this circumstance and giving Purges
we shall relieve the Patient.

757. Where there is an rupture of vessels many Effu-
sions to cause Pressure are often find the vessels disten-
ded, often meet with Disease in the choroid Plexus, or
excretion of blood in the vessels. sometimes with Humors
supposed to be Hydatids, hollow, containing a little of
Blood, others in the ventricle, or on the surface of the
Brain, Abscesses & Humors in the substance or on the
surface, the Membranes either become firmer or looser in
texture than natural, Exostosis from the Cranium
leading from the inward, Patches of Effusion deposit
on the Dura Mater & other Membranes, the Sula has been
found cartilaginous & ossified.

766. In rainy and moist seasons, especially where there are sudden alternations of Heat & Cold.

767. The appearances are various, you would not look for the same in a space as in a caputent Habit. and you have a great number of sanguineous throats, of serious Apoplexies. A Person has an attack of Apoplexy recovers and this occurs again, or if you have it produced by particular positions of the Head or by Coughing, there may have been serum effused, but it becomes absorbed again. You most frequently have serum or some other pellucidous fluid thrown out into the cavity of the Brain, sometimes an Effusion of Blood, but still more commonly a vessel gives way.

769. We are ignorant of the healthy functions of the Brain and thence, so that we must be more so in Disease. 843. Apoplexy often occurs from increase of vascular action and nervous Power, more frequently however the contrary. Achromy's work recommended.

770. After a fit of Epilepsy, the Patient generally goes to sleep & is capable of being awoken out of it, not so in Apoplexy for the Patient is always supposed to be in a Comatous state. The Patient is very readily awake from his lethargy and unable to answer questions & talk about. In Epileptic Epilepsy there is no stertorous Breathing and the Limbs are relaxed. In Cataplexy the Limbs may be moved in any direction, and they will remain there. In Epilepsy there is not so heavy and when awake he appears delirious. When it is produced by Putrid Fermentive Poisons, he generally labours under Comatousness.

771. When Apoplexy depends on congestion there are no Paralytic Signs & Symptoms, whereas when it depends on Effusion the Patient has generally been paralyzed for some time before.

Charcoal, &c.—peculiar state of Atmosphere;—Gouty metastasis,—Concussion, or other mechanical injury of the brain.

767. Account of various morbid appearances found in the Brain and its appendages after death; — and doubts on the generally alledged agency of most of these in *causing* the disease.

768. Facts proving the intimate *functional* and *sympathic* connection between the Brain and Liver; with new views of the cause and cure of the disease founded on these.

769. PROXIMATE CAUSE.—Compression and torpor (or the converse) of the Brain;—and consequent defect of nervous influence in the organs of Sense and Motion.—Illustration of this from cases recorded by Boerhaave, Kirkland, &c.; and the universality of it shewn.

770. DIAGNOSIS. Circumstances distinguishing *idiopathic* Apoplexy from Lethargy,—from Epileptic Sopor,—from Hysteric Carus, and Catalepsy,—from Typhomania or febrile stupor,—from the *symptomatic* Apoplexy caused by Inebriation, Narcotic Poisons, Mephitic Vapours, General Dropsy, Ischuria Vesicalis, Hydrocephalus, &c.

771. Common division of Apoplexy into the *sanguineous* and *serous*; and the different ideas attached to these terms by different authors. True grounds of the distinction; and utility of it in a curative view.

772. Apoplexy and Paralysis compared, and shewn often to differ rather in their extent and degree, than in their nature. Examination of Dr. Kirkland's opinion respecting the special seat of each.

773. **PROGNOSIS**—to be drawn from—the patient's age,—constitution,—habit of body,—and previous mode of life ;—the exciting cause ;—the degree of the disease ;—its being a first attack—or a recurrence ;—its being accompanied with, or free from, Hemiplegia or Convulsions.—Sometimes on a smart Fever supervening, with delirium, and general diaphoresis, the Apoplexy is removed ; but more frequently, pyrexia indicates local irritation in the Brain, and fatal result.—Circumstances under which one or the other more especially happens.

774 The **TREATMENT** will chiefly consist in means calculated—1st. To remove the compression, — and 2dly, to re-excite the energy of the brain ;—*e. gr.* General or local bloodletting,—or both ;—different modes of this,—and respective advantages of bleeding from the arm, from the jugular vein, or temporal artery,—or by means of leeches, cupping, &c.—with the *form* (771) of the disease to which each is especially suited, and the extent of the evacuation.—Regulation of temperature ; application of cold to the head.—Position of the body.—Purging ; importance of this,—different modes in which it operates, and regulation of the quantity and *kind* (763) of the discharge, according to the circumstances and stage of the disease ;—with the articles most proper under each, and the mode of using them.—Blisters to the head or its vicinity.—Diaphoretics,—choice of these.—Blisters or Sinapisms to the feet.—Stimulants of the diffusive kind, and not exerting any narcotic effect upon the brain,—*e. gr.* Ammonia,—Serum Sinapicos, &c.

775. Remarks on particular remedies sometimes recommended in Apoplexy,—*e. gr.* Sternutatories, Eme-

779 The difference between Paralysis and Apoplexy is,
that in the one the cause acts more immediately, while
in the other / Paralysis / it acts more slowly.

tics, &c. and the circumstances under which they are proper or safe, pointed out.

776. Supplying the lungs with Oxygen Gas proposed, to carry off the accumulated Carbon with which the arterial blood is evidently loaded: most convenient mode of this.

777. Management after recovery, as to diet, exercise, &c. to guard against a relapse.

778. The treatment of the Hemiplegia or other paralytic state, so often accompanying, and remaining after Apoplexy, properly fall under the next general head.

OF PARALYSIS.

779. Origin and meaning of the word.—*SYN. Resolutio nervorum*; *CELS.—Neuralysis*, vel *Myalysis*?—A general term comprehending various species of nervo-muscular incapacity.

CHARACTER.—The motion of one or more of the Voluntary organs or parts of the body, greatly diminished or entirely suspended, often with impaired sense of feeling;—and independently of inflammation, or mechanical stiffness.

780. General view of the nervous functions as exercised by the Brain.—by the Nervous cords,—and by their Sentient Extremities respectively; and explanation of the forms of Paralysis, whether of *Motion*, of *Sense*, or both, founded on this.

781. Nosological division of Paralysis into species, as affecting half the body longitudinally (*Hemiplegia*)—transversely (*Paraplegia*),—or individual *parts* or muscles, as of the arms or legs (*Paresis*), the tongue, glottis, eye-lids, rectum, bladder, &c.—or,—as affecting particular

organs of sense; as of touch (*Anæsthesia*), of vision (*Amaurosis*, *Gutta serena*), of smell (*Anosmia*), of taste (*Agheustia*), of hearing (*Dysecoea*), &c.—Comparative frequency, and occasional combination of these.

782. PREDISPOSING CAUSE; A peculiarity in the Nervous System, not definable, but oftenest affecting the Brain,—and then generally connected with Apoplectic tendency (764).

783. EXCITING CAUSES, — Whatever occasions lesion of substance,—compression,—or torpor of the nerves, whether at their *source*, in their *progress*, or at their *extremities*; as wounds,—contusions,—fractures,—pressure from tumours,—from partial congestion,—or from hæmorrhagic, suppurative, or watery effusion;—stoppage of customary discharges;—repulsion of eruptions;—gouty metastasis;—convulsions;—violent anger, terror;—grief;—cold;—application of lead (*Colica Pictonum*,)—of Arsenic?—of Quicksilver? &c. *Belladonna*.—Sympathetic influence of intestinal irritation:—long continued Rheumatic pain:—Epidemic influence?—Various other causes inducing general debility in persons predisposed to Paralysis.—Illustration of these respectively from histories and dissections; and the modes in which they severally appear to act.

784. Inquiry into the PROXIMATE CAUSE OF PARALYSIS, as deducible from obvious morbid states of the Brain or Nerves discovered on examination after death; and difficulties still attending this, as well from the occasional absence of such perceptible states under actual Paralysis,—as from the frequent presence of them where no Paralysis had existed: General conclusion on this head.

782. Nervous weakness may be constituted as predisposing
to Paralytic affections.

783. There are two ways in which Paralysis may be pro-
duced, one from the lesion or injury of the sensorium
itself, such is the case in the Paralysis following Apoplexy
the other from the lesion or injury of the sentient extremities
of the Nerves, the Paralysis resulting from overblowing, from
wounds, or from the Patient exposing himself to the open air
while asleep, are instances of this. For it is no uncommon
circumstance for a Person, if he falls asleep in the open air
or in a room, to find the Muscles of his face paralyzed.
Dr. B. related the case of a gentleman who lost his proprio-
ceptive power over the Muscles of his feet,
those of the lower limbs first, then arms, speech, &c. &c. &c.
those of respiration when he died, yet before the last cir-
cumstance took place he was looking as if without con-
sciousness, yet wholly unable to move himself.

707 Sometimes Hemiplegia is removed by the repetition of
the Paralytic Seizure.
Compared with Apoplexy it is not to be considered a
dangerous Disease

785. Explanation why, in paralysis depending on the Brain, the *Cause* is very universally found on the side *opposite* to the paralytic affection:—exception to this.—Extensive field still open to Anatomical investigation on this subject; and great importance of it shewn, as the only means of ascertaining, not only the *morbid influence*, but likewise the *natural functions of the Several Parts of the brain*.

786. The DIAGNOSIS between Paralysis, and loss of voluntary motion from mechanical stiffness, or muscular inflammation, generally obvious; but these sometimes combined.—Paralysis also, occasionally attended with violent pain, rheumatic swelling, and spasms or tremor of the affected parts.—Essential distinction between *transitive* or *periodic*, and *continued* Paralysis.

787. PROGNOSIS. This very different according to the *form* (781),—the *degree*,—and the *cause* of the affection; but generally unfavourable in Hemiplegia, especially in elderly, debilitated, or intemperate persons.—*Bad signs*,—gradual and progressive loss of feeling, with coldness and wasting of the parts.—*Good signs*,—prickling sensation,—flushing heat,—spasmodic twitching,—rheumatic and inflammatory swelling supervening.—Hemiplegia sometimes removed by spontaneous Epistaxis, or Hæmorrhoidal flux:—common explanation of the latter objected to, and another proposed.

788. The TREATMENT NECESSARILY VARIOUS, not only accordingly as the morbid state exists—(a.) in the Brain,—(b.) in the Nervous Cords,—or (c.) in the Sentient Extremities;—but also as its Exciting Cause (783) may be *fixed* or *removeable*,—or its Proximate

Cause consist in *change of structure*, or merely in *suspended function*:—whence the importance of previously investigating these points. The general indications then will be—1st, To remove any cause of compression still operating, whether from vascular turgescence, extravasation, effusion, tumour, &c.—2dly, To gradually re-excite the torpid portion of the Brain or Nerves to a sensible and active state.

789. Means adapted to these respectively; topical bleeding,—blisters,—setons,—issues:—remedies tending to equalize the distribution of the blood, and promote absorption, *e. gr.* mild diaphoretics;—gentle diffusive stimulants, as *Liq. Ammoniae Acetatis*,—*Ammoniae Carbonas*,—*Semen Sinapeos*,—*Infus. Armoraciae*.—*Bals. Peruvianum*,—*Ol. Terebinth*, &c. External heat, by—tepid bathing, *laconicum*.—Electricity.—Stimulating the superficial nerves by warm plasters, *Cantharides*, *urticatio*?—*Linimentum Ammoniae*,—*Epithema Terebinthinæ*,—*Ung. Acidi Sulphurici*,—*et Linim. Sinapeos Ph. Nos. Guy.*—Friction;—Regulation of Exercise, of Diet, and Clothing.—Change of climate.—Cold bath.—Tonics.

790. Adaptation of these remedies to the particular *Seat* and *Degree* of the disease (781) as well as to the nature and operation of the ascertained or probable *Exciting cause* (783), pointed out in the principal forms of the disease, *e. gr.* *cerebral*,—*chordal*,—and *extremital*, either separately or conjointly.—Strictures on the common, early, indiscriminate, and often pernicious employment of powerful stimulants, whether local or general; and directions for their management.

791. Observations on the use of *Emetics*,—*Opium*,—*Arnica*,—*Rhus Toxicodendron*, &c. strongly recom-

789. If you can make out that the Disease originates
from Pleurisy, obviously here as well as in Apoplexy,
you should endeavour to remove that pressure; hence
the advantage of having the Head shaved and using
cold applications, Blister, Issues, Setons, & friction with
Mercurial Ointment, as well as the internal exhibition
of Mercury to excite Absorption, or to remove any suppu-
rative matter if it exists.

We often find it necessary to take away a quantity
of Blood, particularly in young Subjects.

If you think it advisable to apply Stimulating
Remedies, it should be considered how far the Strength
of the part will bear it.

The local remedies are various, we often think, it neces-
sary to keep up a degree of warmth on the part by friction,
Mustard, Liniments &c. allowing the Bath waters to
take on the part from a height will be more efficacious.

792. This is a Disease which more frequently is the result of mental impressions, than of an Accident. It is not exclusively confined to any age or sex, or particular Country.

793. The fit is not accompanied by any conscious loss of the patient's faculties, after the Attack the Patient generally goes to sleep and when he awakes he feels a Head ache; he may never have a second attack, or they may recur frequently at various intervals.

mendedd by some ;—with an account of the success attending the gentle and repeated operation of particular cathartics.

OF EPILEPSY.

792. Etymology of the term.—SYN. *Morbus sacer, comitalis, sonticus, &c.* meaning and origin of these names.—Anglicè *Falling Sickness, Fits.*

793. CHARACTER. Sudden privation of Sense, accompanied with unusual Motions,—generally with violent Convulsion of all the Voluntary Muscles, and frothing at the mouth, followed by drowsiness or Sopor, great fatigue, and entire oblivion of the fit :—recurring at various intervals,—and often attacking during sleep.

794. Variety which takes place in the disease in different cases, and even in the same at different times,—with respect to the *degree* and *frequency* of the paroxysm,—to its coming on without warning, or being preceded by certain sensations referred to the head itself, or to distant parts (*aura epileptica*) ;—and lastly, to its effects upon the faculties of the mind and body ;—illustrated by cases.

795. PREDISPOSING CAUSE.—A peculiarity of condition with respect to the Brain,—and probably also to the Nervous System in general ;—perhaps always more or less connected with Original Conformation, and, therefore, often hereditary.—Male sex?

796. EXCITING CAUSES.—Whatever, under Epileptic *tendency*, either impairs the tone and vigour of the Nervous System in general, and of the Brain more particularly,—or communicates any mechanical shock, or

any very violent and unusual impressions to the Sensorium;—as blows, falls, or other external injuries;—exostoses, tumours, abscesses, or ossific deposit, within the brain or on its containing parts;—similar causes affecting the Nervous Cords, or their Sentient Extremities, *e. gr.* parturition,—dentition,—worms in the alimentary canal, &c.—Mercurial and Arsenical irritation?—Tickling,—Venereal orgasm;—Sudden terror,—violent anger,—Intense Study.—Whatever disturbs the due balance of the Circulation, whether by occasioning excess or defect of blood in the head; as Inebriation,—Narcotic Poisons;—spontaneous Plethora, or the stoppage of customary discharges, whether of blood or other fluids;—Inanition:—Nervous Irritation in the eruptive stage of Small Pox, &c.—Artificial Repression, or Spontaneous Metastasis of various eruptive and other diseases, both acute and chronic.—Imitative propensity, particularly conspicuous in Children and Women.—Modes in which these may respectively be presumed to act.

797. PROXIMATE CAUSE. The nature of this extremely obscure, perhaps inscrutable;—not only as consisting in a *diseased action* of certain organs, with the natural and healthy operations of which we are little acquainted,—but as being, in different cases, connected with *opposite* External Conditions of the body, and removed by means tending to correct these respectively. Attempt to elucidate this point, by a consideration of the nice balance of functions necessary to general health; and the different effects that ultimately result from *inequality in their degree*, or from *derangement in the order of their succession*, according to the original disposition, or the acquired tendency of the human system.



—Explanation both of the periodic and accidental recurrence of Epilepsy upon this principle.

798. Enquiry into the nature of the *Aura Epileptica*; —and enumeration of circumstances tending to shew, that this sensation may arise from primary irritation of the Brain, giving a false reflex feeling of impression made upon distant parts.—Importance of determining this point, as occasionally necessary to direct certain measures in the treatment, where such sensation occurs.

799. DIAGNOSIS. Remarks on the distinction made by Sauvages between *Epilepsia* and *Eclampsia*, and by Dr. Cullen between *Epilepsy* and *Convulsion*; and doubts of its validity.—Circumstances serving to discriminate genuine Epilepsy from Hysteric Convulsion (*Eclampsia Hysterica*, Sauv.); and from the feigned Epilepsy (*Ep. simulata*) of mendicant impostors.

800. Strictures on the numerous Nosological subdivisions of Epilepsy, as arising from individual exciting causes ascertainable only by dissection;—and arrangement of it in a *practical* and *curative* view, under a few general heads, viz. as proceeding primarily from the Brain (*Ep. idiopathica*,—*spontanea*,—*cerebralis*); from remote irritation (*Ep. symptomatica*,—*verminosa*,—*calculosa*,—*parturientium*, &c.);—from the effect of certain poisonous matters operating upon the Nervous System. (*Ep. accidentalis*,—*venenosa*,—*febricosa*, &c.);—from misplaced or metastatic morbid action, in various constitutional diseases liable to that kind of aberration. (*Ep. exanthematica*, &c.) from inherent propensity to imitation. (*Ep. sympathica*.)

801. PROGNOSIS,—To be drawn from the age,—constitution,—and habit of the patient;—from the dis-

ease being spontaneous, symptomatic, or accidental (800);—from the degree,—the frequency,—and the habit of its recurrence;—from its duration,—the effects it has produced,—and its being accompanied by, or alternating with, other complaints, &c. Always unfavourable where hereditary,—where with a particular shape of the head,—where it has impaired the memory or judgment,—has arisen from any violent shock, whether mechanical or mental—or has passed over the period of Puberty without being suspended.—Has sometimes been removed by Intermitting and other fevers, or by Eruptions on the skin:—Often induces fatuity,—occasionally mania, and now and then terminates in Apoplexy, Paralysis, or Hydrocephalus.

802. TREATMENT. But little can be done during the fit when violent, except restraining the patients from injuring themselves: best modes of this.—In the intervals, the plan must be conducted upon the general principles laid down in par. 800.—

A. Of lessening or removing the particular Exciting Cause (796), if any such exist:—The means of fulfilling this—(as far as practicable), deduced from par. 796—with instances of their success.

B. Of correcting the obviously morbid state of the body in general, or of particular organs—whether consisting in plethora, or inanition,—in irritability,—in torpor,—or in cachexia;—by bloodletting general and topical; various modes of, and their advantages respectively under certain circumstances:—Issues, Setons, Blisters.—Generous diet.—Various metallic and other tonic, sedative, and antispasmodic remedies; *e. gr.* preparations of Zinc, Copper, Silver, and Iron:—Cold bath, exercise, friction:—Opium, Hyoscyamus, Vale-

801. If the Att. Com. complaint occurs in a young subject who has never had more than an attack and has never taken any remedy, then our Prognosis will be favourable. The disease in comparison to Apoplexy is more safe as regards life. But it often happens that the Mind & Judgement are impaired.

802. To afford relief you must first ascertain the Cause, if it occurs in a young subject without any previous one, you examine his counter pulse, the state of his bowels, but more particularly his Pulse, perhaps it may be advantageous, but sometimes this injury that G. cannot cure the Disease is very obvious, but it may be of use.

If Irritation in the Alimentary Canal be the cause of Epilepsy, then Purging will be the best remedy. When the Cause had not been obvious, then the employment of Ionic Remedies has been useful, without without Antispasmodics. Of the Metallic Tonics. Dr. B. has seen the benefit. Nitras most useful, also the Iodine & Iodine preparations of Iodine. He has given 9 grs of the Arg. Nit. 3 Day, but it will produce sickness if given in too large doses, it will also give a permanent tinge to the skin, nails and Hair, according to the degree of exposure to Air.

In the obstinate form of the Complaint, the leaping off of discharge from the Head larger than in any other Disease has been employed, frequently with success but often without any advantage, or even the least diminution of the complaint. But when you can make out that it arises from some Chronic pressure on the Brain it ought certainly to be tried.

Particular attention also to be paid to Disordered secretions as the state of the Bowels and the Urine should be kept calm.

806 This Disease is confined to a particular period of life and is dangerous; Dr B thinks it is more common among girls than Boys; the weakness is sometimes so great as to produce Hemiplegia, it is attended with obstinate constipation and the Patient is unable to move her legs, but drags them after her.

807 It is uncertain as to its duration.

rian, Digitalis, &c.—Milk and Vegetable Diet;—or continued slow course of Alterative remedies directed by the particular kind of Cachexy present.—Recalling certain eruptions or excretions that had disappeared.

C. Of disconnecting the *morbidly* associated impressions and actions, by changing the previous habits and mode of life, to opposite and more natural ones;—Examples and authorities on this head, corroborating the principle laid down in par. 797.

803. Observations upon certain *reputed* specifics, Viz. Agaricus muscarius,—Viscus Quernus or Misseltœ,—Orange-tree leaves,—Cinnabar, &c. &c.

804. Of the beneficial effects arising from the moderate impression of fear in the Sympathetic or Imitative Epilepsy;—illustrated by remarkable examples.

OF CHOREA.

805. SYN. *Scelotyrbe* of Galen, &c.—*Chorea* of the moderns;—Gallicè, *Danse de St. Guy*.—Anglicè *St. Vitus's dance*.—Origin of them respectively.

806. CHARACTER. Irregular, *involuntary*, and ludicrous motion of the *voluntary* muscles, generally affecting one or other side more especially;—without pain,—or obvious bodily complaint; occurring in both sexes, and chiefly between ten and sixteen years of age.

807. Account of the manner in which the disease usually commences,—the variety and degree of the symptoms, and the period of its duration.

808. CAUSES;—*Predisposing*,—a peculiar condition of the Brain, generally connected with irritable and delicate frame of Body and Mind;—*Exciting*—whatever

weakens the system, or induces morbid irritation ;—as Fevers,—Rheumatitis,—Terror,—Worms or saburra in the alimentary canal,—retrocession of eruptions, &c.

809. PROXIMATE CAUSE—obscure ; but evidently connected with muscular mobility, and defective power of volition ; with reasons for believing, that these arise from irritation of the brain, and this irritation *generally* depending on Congestion.

810. DIAGNOSIS easy between Chorea and other spasmodic diseases occurring during adolescence ; but sometimes confounded with slight Hemiplegia in adults ; and is occasionally a symptom of Hysteria in grown women. — Account of some curious epidemic disorders resembling Chorea, which have prevailed in certain countries from the influence of superstition and fanaticism.— Description of the *Chorea simulata*, or *Tarantism* of Italy.

811. PROGNOSIS.—Chorea, though sometimes obstinate, is often cured spontaneously ; and unless extremely violent, is seldom attended with any danger : but occasionally alternates with Acute Rheumatism (*Rheumatitis*) or is converted into Epilepsy, Paralysis, or Maniacal delirium.

812. TREATMENT deducible from 809, is supported by general experience ; and consists in—

A. Removing any morbid irritation present, whether from General Plethora, Cerebral congestion, or Sympathetic Erethism ;—by Venesection ? Doubts respecting the existence of general plethora in Chorea, and strictures on the practice of Sydenham.—Cupping,—Leeches,—and Blisters near, or upon the head.—By Purging ;—great benefit of this in most cases of Chorea ; and

812. We should pay particular attention to the function
of the Primæ Viæ, if there is any tendency to costiveness,
2 or 3 grains of opium should be given on individual attacks or
in a patient, in order to produce a natural state of
the alvine discharge, and after this you must have recourse
to a friction diet and Jones's tonic to the force of the sys-
tem; B & B have seen the judicious use of the Cold Bath
marked also the Discharge of the Primæ Viæ.
To children he has given the Team's Calumet and used the
Cold Bath with success.

examination of the mode in which it acts, and the articles most effectual for the purpose.—Recalling eruptions or discharges that had been suppressed.

B. Lessening the mobility of the Nervous and Muscular Systems in general, by allaying the morbid, and exciting a natural degree and kind of action in them;—by Opiates, —alone or with Diaphoretics:—Digitalis;—Stimulants; Electricity;—Tonics, —especially the preparations of Zinc,—Iron,—Copper,—Arsenic?—Argentum Nitratum;—Cinchona,—Myrrh;—Cold bath,—Affusion of cold water on the head:—Friction,—Muscular Exertion, &c.

OF HYSTERIA.

813. Origin of the term *Hysteria*.—SYN. *Metromania*;—Fr. *Vapeurs*;—Angl. *Fits of the mother*, *Hysterics*.

814. CHARACTER.—So great is the number, so varied the kind, and so rapid the change of symptoms in Hysteria, as to render a concise character extremely difficult;—there being few diseases of the Nervous Class, which are not occasionally imitated by, or connected with, Hysterical affection. The paroxysms, however, (which occur without any regularity) generally preceded by lassitude,—coldness of feet,—copious discharge of pale urine,—pain in the head, loins, or stomach, attended with borborygmi, globus hystericus, difficult breathing, feeling of strangulation, loss of sense, and violent Convulsions, Coma, or *apparent Syncope*, &c. and often end in fits of alternate laughing and crying.

815. The paroxysm sometimes alternates with the loss of voice (*Aphonia hysterica*),—temporary para-

lysis of particular parts (*Dysphagia*,—*Ischuria*, &c.)—*Carus*,—*Catalepsy*,—and various forms of mental derangement, *e. gr.* *Nymphomania*,—*Fatuity*, &c.

816. PREDISPOSING CAUSE,—a certain Mobility of the Nervous System, almost peculiar to females,—especially those of a sanguineous, plethoric, and irritable habit;—occurring chiefly between the age of 14 and 40 years,—and often obviously connected with some irregularity of the uterine function (813).—More frequent in cold than in hot climates:—probable cause of this.

817. EXCITING CAUSES.—Indolent life,—luxury,—violent passions and emotions of the mind;—irritation in the alimentary canal;—suppressed, painful, or excessive menstruation;—disagreeable odours, sights, &c.—repression or metastasis of Chronic Eruptions;—Intermitting Fevers, &c.

818. DIAGNOSIS—sometimes difficult, from the Proteiform nature of the complaint.—Circumstances serving to distinguish it from Hypochondriasis,—from Epilepsy, &c.

819. PROGNOSIS.—Hysteria rarely fatal in its own form, unless the paroxysm be induced by some very violent cause;—and generally disappears in the decline of life.

820. THE TREATMENT will necessarily differ very much, according to the form or degree of the complaint, the constitution, habit of body, and condition in life of the patient, &c. The indications are—1st, *In the paroxysm*, to check its violence:—2dly, *In the interval*, to ascertain, and endeavour to lessen or remove, the Predisposing and Exciting Causes.

821. The 1st may be done, in plethoric and robust

816. With light hair and fair complexion.

Sp. It has a remarkably great share in bringing on the Disease, but more particularly affections of the veins. Nothing is so remarkable as the sympathetic affection which occurs in Typhoid, or much so as to puff the belly to an extraordinary size.

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821. The chief thing appears to be to look well to the
Habit and constitution of the Patient and employ
your means accordingly. e.g. after Bloodletting from
the Patient to the state of the Bowels, as it is usually
ly associated with costiveness, Calomel as being small
in quantity and tasteless will answer this effect,
also Belladonna or Pile. does much the same, if these
cannot be got down or the Stomach is irritable, Opium
drives, consisting of Belladonna dissolved in warm water
may be employed.

If the Patient is able to swallow the following antispasmodic
mixture will be advantageous:
R. $\frac{ss}{ss}$. Aniseed Oil. $\frac{ss}{ss}$. Mustard Oil $\frac{ss}{ss}$. Oil of
Sulph. $\frac{ss}{ss}$. To this $\frac{ss}{ss}$. of the Tinct. of the same. If the Patient cannot
swallow the Tinct. of the same. $\frac{ss}{ss}$ may be added up in the form of Symples.
She should be relieved from the tightness of her dress.

In Dysmenorrhoea &c. has never known any remedy
so effectual as the combination of Opium & Camphor.
Putting the Part in warm water &omenting the Part give
relief.

825. The marked characteristic of this disease is that the Patient can think of nothing but himself.

habits, by Bloodletting,—by nauseating Emetics,—by the application of Cold, by Digitalis;—in others, by Opiates,—by stimulant and antispasmodic remedies, *e. gr.* Ammonia,—Æther,—Camphor,—Castor,—Musk,—Assafoetida, &c. Warm Bath,—Pediluvium.

822. The means for effecting the 2d, will be directed by the presence of Plethora, or of Inanition, and a spare or full diet accordingly;—by adverting to, and correcting, the morbid state of individual functions and organs, particularly of the Stomach,—Intestines,—Uterus, &c.;—by regulating the Exercise,—Clothing,—Mind, and Amusements;—and sometimes, when practicable, changing the *sexual condition* of the patient.—By the use of various Metallic and other Tonic Remedies,—Cold Bathing,—&c. to lessen irritability and improve general strength.

OF HYPOCHONDRIASIS.

823. Derivation of the name.—*SYN.* Spleen,—Vapours,—Low Spirits.

824. *CHARACTER.*—Unusual anxiety, depression of spirits, and belief of present or dread of future evil, directed particularly to the state of health; always accompanied with symptoms of indigestion, and other marks of bodily disorder; and generally also with various, irregular, and often unaccountable sensations and affections, referred exclusively to the patient's imagination.

825. Detail of the more common and prominent symptoms, as they affect certain organs and functions, *e. gr.* those of the Stomach, Intestines, Skin, Kidneys,

Lungs, &c. ;—as they occur in persons of different temperaments,—conditions,—habits of life—and particular idiosyncracies ;—and as they assume, on the one hand, the variable, Corporeal, and *Hysterical* form,—or, on the other, the more fixed, Mental, and *Melancholic* one :—with their respective degrees, duration, or recurrence.—Account of some of the more singular and absurd notions entertained by hypochondriacs, and the strange resolutions formed in consequence.

826. PREDISPOSING CAUSE. — A peculiarity of constitution with respect to the Brain and Nerves, generally original,—often hereditary,—and though not always distinguished by external character, yet obviously much more frequent in Males than in Females,—in advanced than in early life,—and in the *Melancholic* than in the *Sanguineous* temperament.

827. EXCITING CAUSES. Full diet, especially with regard to eating ;—indolent inactive life ;—intense study, or anxious pursuit of business ;—cold, damp, and variable state of the atmosphere, especially that succeeding the Autumnal Equinox ;—Intermitting and Remitting fevers ;—atonic, misplaced, or retrocedent Gout ;—the stoppage of natural or customary discharges,—or the recession of certain cutaneous affections : — depressing passions, *e. gr.* Grief, Anxiety, and Fear, by whatever cause produced :—Change in the relative capacity of the Arteries and Veins, at a certain period of life. (556)—Enquiry into the reason why this disease is more frequent in England than in any other country.

828. EXPLANATION of the circumstances in which these different causes would appear to concur in inducing—

Q26. You find those who have dark hair and a fair complexion more frequently the subject of this disease than those of an opposite character.

829. Dr. B. does not admit this as he has often seen
Patients in the worst forms of this Disease in whom
the Bowels were regularly evacuated daily.

830 We generally think the distinction easy as regards
Dyspepsia, we have only to enquire whether his spirits
are much depressed.
Between Melancholia & Dyspepsia. Dr. B. knows of no differ-
ence but in degree.

829. THE PROXIMATE CAUSE;—a sluggish and irregular action of the Nervous and Vascular Systems in general, but more especially apparent in the functions of the Alimentary Canal, and in the Sensorial operations of the Brain.—Account of the principal theories of the disease;—and an enquiry into the nature and extensive influence of the *chylopoeietic* process;—the striking sympathy, both neuropathic and secretory, existing between the Liver and Brain;—with conclusions drawn from thence,—supported by the concurring testimony of authors respecting certain facts noticed in the history of the disease from the earliest ages,—and corroborated by the superior success of a particular mode of treatment,—all tending to prove,—that THE PROXIMATE CAUSE OF HYPOCHONDRIASIS, *in a curative view*, CONSISTS IN A SLUGGISH AND IRREGULAR STATE OF THE HEPATIC FUNCTION.

830. DIAGNOSIS. Difficulty of drawing a precise limit between Hypochondriasis on the one hand, and Dyspepsia, Hysteria, or Melancholia, on the other;—not only from their having several symptoms in common, but from their being often combined together, and sometimes reciprocally passing into each other.—Marks serving to distinguish them, founded on a consideration of the patient's Age,—Sex,—Temperament,—Hereditary Constitution,—and Habits of Life;—the predominance of certain symptoms, as being local or general,—Corporeal or Mental;—and the circumstances under which the case may have been formerly relieved, cured, or converted into some other form.

831. PROGNOSIS. This generally favourable in early life, especially in persons rather of the Sanguineous

Temperament, and where the disease has clearly arisen from causes operating primarily upon the Chylopoietic organs; but the contrary in advanced age,—in those who are of the Melancholic Temperament,—and where it has either been caused by, or become intimately associated with, strong Mental Impressions.—Occasionally terminates in fixed Melancholia.—Has been frequently removed by other forms of disease supervening,—especially Diarrhoea, Fevers, Jaundice, Dropsy, &c.:—pathological conclusions deducible from this, and serving additionally to illustrate the nature of the proximate cause assigned (829).

832. TREATMENT. This must differ in different cases, and be directed more or less to the *bodily* or to the *mental* indisposition, accordingly as the one or the other is found to predominate. The principal indications, therefore, will be—

A. To ascertain, and endeavour to correct, the particular dyspeptic or other morbid state of the Alimentary Canal, and of the organs more immediately connected therewith.—

B. To restore to its proper seat or form, any other complaint, upon the removal or spontaneous cessation of which the Hypochondriacal affection had supervened.—

C. To occupy the mind with naturally associated impressions of superior force; and thereby gradually weaken, and finally destroy, the morbid concatenation of ideas which had taken place.—Modes of doing this; with an account of the Amusements,—Exercises,—Clothing,—Diet,—and General Regimen proper for Constitutional Hypochondriacs.

832. The principal indication is the proper management of the Patient; one of the chief points is paying attention to the Bowels, and here we have a remedy which is particularly useful viz. Calomel. we give a few grs of Calomel at night followed by a purge in the Morn.

B. In this Disease you often have a particular sensation and dryness of the skin followed come on followed by a profuse colluvative sweat.

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